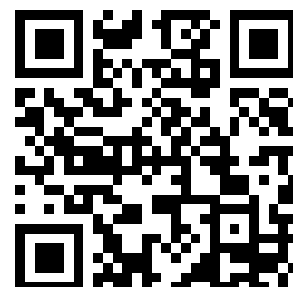

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Managing the Nation's Public Lands

**A Program Report Pursuant to Requirements of the
Federal Land Policy and Management Act of 1976**

For the Period From October 1, 1982 to September 30, 1983

MANAGING THE NATION'S PUBLIC LANDS

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PREFACE: THE 'NEW BLM'

On December 3, 1982, Secretarial Order 3087 initiated efforts to consolidate and streamline Interior's onshore mineral leasing functions. Relevant functions formerly part of Minerals Management Service (MMS) were merged with the Bureau of Land Management (BLM). Royalty collections and distribution remained in MMS. With all the nonfinancial onshore mineral leasing activities housed within the BLM, the following objectives could be achieved more efficiently:

- Integrated multiple-use management
- One-stop service
- Reduced or eliminated overlap
- Responsiveness to users of public lands
- A decentralized organization with merged functions
- Enhanced program effectiveness

These merger objectives also serve as guidelines for the development of the 'New BLM.'

In response to the mandate, the BLM has aggressively pursued full achievement of the objectives. To date, this has included a wide variety of focused activities; among these are:

Organizational Structure

From the outset the merger was a joint effort. A combined task group of MMS onshore and BLM employees was formed to develop several organizational options for management consideration. The BLM minerals organization at the Headquarters and field level was restructured to integrate the new onshore function with existing activities. The BLM headquarters organization now includes a Deputy Director, Energy and Minerals; an Office of Inspection and Enforcement; and Assistant Directors for (1) Solid Leasable Minerals, (2) Fluid Leasable Minerals, and (3) Mineral Resources and Mining Law.

In the field, Deputy State Director for Mineral Resources positions were created with appropriate substructures at each BLM State Office level. Assistant District Managers for Mineral Resources were established in Districts with strong minerals programs. This organizational structure emphasizes decentralization with delegation of authority to the lowest possible level, thus placing program emphasis and responsibility where the workload, staffing capabilities, and user needs exist. A number of geographical changes were necessary to merge existing BLM and MMS onshore program offices in the field. Creation of the new BLM entailed consolidation in 27 locations, 1 new office opening, 8 office closings, and 6 offices changing status.

Program Alignment

Prior to the merger, the responsibility for ten mineral leasing functions had combined BLM and MMS outputs. As a result of the merger, all of these functions, with the exception of royalty collection and distribution, are accomplished solely by BLM. This clarification of responsibility provides the basis for a more responsive, well managed BLM minerals program to serve the public.

The new BLM Energy and Minerals management team is working to develop minerals program goals and utilizing the Department of the Interior's Management by Objectives system to track the completion of the merger. The BLM is continuing efforts to ensure smooth integration of the onshore program by sending Merger Assistance Teams to field offices to help identify and resolve local issues and concerns as well as national issues and problems. Training courses covering various aspects of the new Mineral programs have also been developed and are scheduled for Fiscal Year 1984.

The BLM is confident time and performance will verify that these merger actions and accomplishments will achieve the goals and objectives of the Secretarial Order.

Personnel Placements

Perhaps the most challenging accomplishment of the merger was the placement of approximately 840 personnel nationwide who transferred from MMS to BLM. Personnel Management Committee meetings were held on State, regional, and national levels to place clerical, professional, and managerial employees in new organizational positions. These meetings were conducted with the imperative to do all that reasonably could be done to ensure appropriate placement of employees impacted by the merger.

The placement of managers and employees from both MMS onshore and BLM in key positions is indicative of the attention and emphasis placed on developing a balanced personnel mix to create the best combination of experience and expertise for a decentralized organization.

Communication

During the merger process, open communication between management and employees was a key element in ensuring a smooth integration of the onshore programs into BLM. Bureauwide initiatives such as establishment of a "hotline system" to address employee questions and concerns, formal memoranda, employee meetings, periodic merger updates via the BLM "Inside Track" newsletter, and

orientation sessions all served to keep employees informed of the merger progress. Meetings with industry and other agencies were conducted not only at the Washington Office level, but also at the State and District levels. Concerns, problems, and issues raised by various people and organizations were addressed and resolved at quarterly State Directors' meetings.

Evaluation

The key to successfully merging organizations is to realize that the process is dynamic and continuing until the two merged organizations are no longer differentiated. This entails a constant monitoring of people's perceptions, performance, and frustrations, as well as organizational effectiveness, accomplishments, and failures. In addition to the normal evaluation processes to feed back progress to the Directorate, a special representative from outside the Department of the Interior was appointed by the Director to assess the status of the merger before December 1, 1983. The findings of evaluation teams, merger assistance teams, and the special representative are or will be continually factored into the successful creation of the "New BLM."

Issues and Actions

As a result of management concerns and evaluation efforts, the following national issues were identified for prompt attention:

- Implementation of the Inspection and Enforcement (I&E) Program.
- Consolidation of automated data processing systems.
- Resolution of position classification and personnel inconsistencies.
- Interface with Royalty Management onshore functions.

- Capability of the new BLM to respond to Bureau of Indian Affairs mineral leasing needs.

- Completion of personnel and office moves.

As these problems were identified, action plans were generated, approved by the Bureau Directorate, and immediately set into motion for completion as soon as possible.

To deal with aspects of the I&E implementation issue, for example, the following action items have been or will be accomplished during FY 1984:

- Issue written Washington Office guidance reaffirming Bureau policy for I&E activities.
- Identify roles, responsibilities, and qualifications for various I&E positions.
- Categorize I&E functions by complexity level to assess the feasibility of using nonenergy and mineral field personnel to aid in areas where I&E activities are needed but are lacking.
- Assess training needs for I&E functions and provide internal training to meet those needs.
- Develop recruitment action plans for "hard to fill" I&E positions.

Not all of these issues confronting BLM were created by the merger; some existed previously and were simply inherited from MMS. However, the new BLM management team aggressively is pursuing timely solutions to these and any other problems that may arise.

Often BLM managers must make decisions regarding problems thrust upon them with deadlines outside their control and with options framed by others, while at the same time responding to issues and problems crammed with requirements for technical competence and specialized knowledge or skill. As the new BLM emerges and demonstrates its capability as a viable and healthy organization, the architects of change must realize that over the years BLM continuously has demonstrated its ability to manage the actual, master the unexpected, moderate the negative impacts of change, and mold the future.

I. Program Overview



I. PROGRAM OVERVIEW

A. GOALS AND ACCOMPLISHMENTS

During Fiscal Year 1983, the Bureau of Land Management (BLM) emphasized the management of the public lands and their related resources for the benefit of all Americans. As a vital contributor to the Department of the Interior's "Year of Enrichment," BLM continued the orderly development and wise use of our public land resources to improve the quality of life for present and future generations of Americans.

The 282 million surface acres and approximately 650 million subsurface acres administered by BLM are primarily in the West and Alaska, and are rich in a wide variety of resources. Sound management requires striking a balance between the many uses of the public lands, which BLM is committed to attain. Within this context, we have continued to emphasize the needs of America's people for self-sufficiency in energy, mineral, agricultural and forestry products, for recreational opportunities, and for preservation of historic and cultural resources.

Major accomplishments in FY 1983 toward meeting our goals are summarized in the following list:

- During the year a major reorganization was completed with the transfer of the majority of the onshore minerals operations from the Mineral Management Service to BLM. This consolidation of functions and programs will improve the efficiency and coordination efforts of BLM in mineral leasing activities and in industry services regarding mineral resource developments.
- The final programmatic EIS for mineral leasing in the National Petroleum Reserve, Alaska (NPR-A) was published in March 1983.
- Approximately 2.2 million acres were offered for oil and gas leasing in the NPR-A, and an additional 2.9 million acres were opened for mineral leasing under the Alaska National Interest Lands Conservation Act.
- Noncompetitive oil and gas leasing in the non-North Slope portions of Alaska public lands continued in FY 1983 with the opening by Public Land Order of 4,421,340 acres in the Seward Peninsula area to the mineral leasing laws.
- Ninety percent of the reporting and recordkeeping requirements affecting geothermal program participants were eliminated through regulatory revisions.
- A total of 21 coal leases covering about 28,700 acres were issued. Recoverable coal reserves in these leases are estimated at 997 million tons.
- The production of 134 million tons of coal from Federal and Indian lands generating a combined revenue of \$65.5 million was verified by BLM.
- Interim final rules clarifying the role of the Department of the Interior and the States in the Federal coal management program became effective on January 12, 1983, and were published as final rules on August 19, 1983.
- Final regulations to initiate competitive tar sand leasing in special tar sand areas were published in February and became effective in March 1983.
- The production of 148.6 million tons of 24 solid leasable commodities from Federal and Indian lands generating a combined revenue of \$101.8 million in FY 1983 was verified by BLM.
- Use of approximately 40,000 acres of public lands was granted to state and local governments under the Good Neighbor Program through the provisions of the Recreation and Public Purposes Act of 1926, as amended (R&PP Act).
- 94 Public Land Orders were issued revoking withdrawals on 7.3 million acres in the lower 48 States and Alaska. Some 4.4 million acres were opened to mineral leasing and 329,000 acres opened to mining location.
- 189,000 acres were transferred to the lower 48 Western States under State indemnity selection rights. The remaining entitlement to be transferred is 203,806 acres.
- BLM opened more than 2.56 million acres in Alaska to occupancy, leasing, and disposal under FLPMA, and 5.7 million acres were opened to mining.
- BLM conveyed more than 10.0 million acres to the State of Alaska, bringing the total to 75.3 million acres or about 72 percent of its entitlement.
- BLM conveyed more than 7 million acres to Alaska Native corporations, bringing the total to 30.2 million acres or about 68.8 percent of their entitlement. Also, decisions to convey more than 4 million acres were issued, bringing the total to 34 million acres on which decisions have been issued.
- BLM has identified more than 2.7 million acres as potentially suitable for disposal under the land tenure transaction program.

- A final rangeland improvement policy was issued in FY 1983. This policy provides incentives to encourage private investments in rangeland improvements, assigns maintenance responsibility for structural improvements to the primary beneficiaries, and makes mandatory the use of procedures for evaluating the cost-effectiveness of proposed rangeland improvements.
- To expand opportunities for cooperative agreements with public land users, BLM initiated a Cooperative Management Agreement (CMA) program. Under CMA's, public land users or user groups may share in managing their activities on specific areas of the public lands, subject to BLM supervision.
- More than 1.2 billion board feet of timber were sold in FY 1983 for \$137.7 million and receipts from actual timber harvests were \$104.7 million.
- State and county governments received \$506.5 million from revenues produced from public lands. County governments received an additional \$96 million through payments in lieu of taxes, funded as part of the Department of the Interior's appropriations.

Much of BLM's progress in FY 1983 results from a revitalized cooperative spirit between BLM, state and local governments, private organizations, and individuals. We look forward to furthering this cooperative management as we strive toward balanced, multiple use management of our Nation's resources for all Americans, now and in the future.

B. THE RESOURCES MANAGED BY THE BUREAU

The Bureau of Land Management (BLM) is responsible for achieving balanced and effective multiple-use management of publicly owned land. These lands include 175 million acres in 11 Western States and 64 million acres in Alaska. In addition, about 43 million acres in Alaska are being managed by BLM pending transfer to the Natives and the State. BLM also manages approximately 368 million acres of Federally owned subsurface rights throughout the Nation underlying lands that are administered by other agencies or are privately owned.

Throughout the last century, to raise revenues and to encourage development of the West, the Federal Government sold or granted vast tracts of public domain land to settlers, miners, towns, states, railroads and other private companies. Most of these public domain lands had been acquired by the Federal Government in the course of our national ex-

pansion. The Federal Government also reserved millions of additional acres for such uses as Indian reservations, national parks and forests, wildlife refuges, and defense installations. The lands that BLM currently manages are lands that, for one reason or another, were not transferred to private ownership or reserved for other Federal agencies.

The public lands managed by BLM in the Western States and Alaska are now some of America's last wide-open spaces. National attention has turned to the rich resources of the public lands as the Nation seeks to meet its growing needs for energy, food, timber, minerals, water, wildlife, and recreation. This attention is long overdue and, not surprisingly, has generated increased interest over how to manage and use public land resources. The facts cited below indicate that the stakes are high and continue to grow.

- The onshore public lands contain about 1.6 billion barrels of proven domestic oil reserves and about 12.7 trillion cubic feet of recoverable domestic natural gas reserves.
- More than 55 million acres of public land are prospective sources of geothermal energy. In addition, approximately 2 million acres have been identified as known geothermal resource areas.
- Half of the Nation's coal reserves are in the West, and as much as 60 percent of that coal is owned by the Federal Government. BLM also administers substantial eastern coal reserves, the largest portion being in Alabama.
- Some 35 percent of the Nation's uranium reserves are found on public land in the Wyoming basin and on the Colorado plateau.
- About 80 percent of the Nation's oil shale, the largest known reserve in the free world, lies under public lands, mostly in Colorado.
- The 11 major tar sand sites occur on public lands in Utah, and are estimated to contain almost 2 billion barrels of recoverable oil.
- The public lands contain an enormous storehouse of the Nation's nonenergy mineral deposits, including some of the world class deposits of molybdenum, phosphate, and potash.
- More than 22,000 livestock operators graze about 5.5 million head of domestic livestock on the public lands. Approximately 11 million animal unit months of forage were harvested from these lands in 1983.
- About 1.2 billion board feet of timber are harvested from BLM-managed Federal lands in an average year.
- The public made an estimated 55 million visits last year to hundreds of unique recreational

areas on the public lands. These areas include 13 Wild and Scenic Rivers, 19 National Trails, and 28 Outstanding Natural Areas.

- In addition, 43 National Natural Landmarks and 47 Research Natural Areas have been designated on lands administered by BLM, including one area designated as a component of the Global Biosphere Reserves system.
- The Fort Stanton Cooperative Range Research Station in New Mexico has been designated by the National Science Foundation as an Experimental Ecological Reserve.
- BLM has the Nation's largest cultural resource management responsibility. There are more than 290 archaeological and historical sites already listed on the National Register of Historic Places; 400 more are pending. Nearly 15,000 other sites or areas are potentially eligible for nomination, and inventories are identifying annually an additional 1,000 sites of possible cultural significance.
- No single Federal or State agency manages more wildlife habitat than BLM. The public lands are home to one out of every five of the big game animals in the entire United States, including most of the caribou, brown and grizzly bears, desert bighorn sheep, moose, mule deer, and antelope. BLM also manages 17 million acres of wetlands, 15.4 million acres of riparian habitat, 323,000 miles of perennial streams, and nearly 4.2 million surface acres of lakes and reservoirs. These lands contain more than 86,000 miles of streams that contain trout, salmon, and other sport fish.

The magnitude and value of these resources, along with the high potential for conflicting demands and uses, make BLM issues some of the most pressing domestic resource policy issues facing the Nation. BLM is involved in many high-visibility issues: on-shore oil and gas development, energy facility siting and transcontinental pipelines, coal development, synfuels, nuclear and other hazardous waste disposal, timber production, the availability of water and land for urban development, the disappearance of the Nation's open spaces, and many others.

In addition to providing energy, food, mineral, timber, wildlife, and cultural resources, the public lands provide revenues to the Federal and State treasuries. An estimated \$1.2 billion was collected in FY 1983 and turned over to the Federal Treasury. Portions of this money were paid to state and local governments. These revenues were paid by users of the public lands in the form of grazing fees; energy and minerals lease sale receipts, filing fees, royalties, and rental payments; timber sale payments; recreation and firewood permit fees, etc.

(More detailed information on these revenues and their distribution is provided in Parts II and III of this report.)

C. THE HISTORY OF BLM'S MISSION

In 1785 the Surveyor General began the first land survey under the United States rectangular survey system, and the first sale of public lands was held in New York City in 1787. Similar sales were conducted by the Board of Treasury for 25 years. To meet demands of pioneers and frontiersmen, Congress established the first land offices in Ohio in 1800, and followed up by establishing The General Land Office in 1812. In 1849, The General Land Office became part of the Department of the Interior.

The deteriorating condition of the public lands after the turn of the 20th century, underscored by the drought and depression of the 1930's, resulted in the passage of the Taylor Grazing Act in 1934. The U.S. Grazing Service made the first effort to actively manage the unreserved public lands. The Act focused primarily on grazing management rather than on a broader spectrum of uses, still reflecting perspectives that would change following World War II. The Act perpetuated the assumption that the public lands eventually would be transferred to private ownership.

This assumption was reinforced in 1946 when the Bureau of Land Management was formed (through the merger of the General Land Office and the Grazing Service) to serve as custodial manager of the public lands. BLM's management authority was scattered among a myriad of existing laws involving mining and mineral leasing, grazing, timber, material sales, public land sales, etc. The scattering of authority made BLM's operations complex, inefficient, and often times *ad hoc*, and reflected a lack of clarity about BLM's mission. Combined with the assumption that the land would eventually be disposed of, this confusion had the effect of limiting the extent to which Congress was willing to provide funding for investments that would improve the productivity of the public lands.

In the Classification and Multiple Use Act of 1964, Congress established a temporary process for reviewing the public lands in Federal ownership to determine which should be classified as suitable for disposal, and which contained values that would make them best suited for retention in Federal ownership. In the same year, Congress created the Public Land Law Review Commission to study the issues of public land management and recommend needed changes in policy and authorities.

The Commission's report was referred to frequently in the development of what became the Federal Land Policy and Management Act (FLPMA) of 1976. The first version of this comprehensive public land law was introduced a year after the release of the report in 1970. After consideration by three Congresses, the Act reflects changing public priorities that had evolved over a decade.

FLPMA establishes the national policy that the public lands shall be retained in Federal ownership and managed for all Americans under the principles of multiple use and sustained yield. In general, lands are disposed of only if, as a result of land use planning procedures provided for in the Act, it is determined that disposal of a particular parcel will better serve the national interest. The Act mandates that decisions on the use of the lands be based on inventories of the resource base and on the results of considering alternative levels and types of use. Furthermore, the decisions are to be made with the full participation of the public, and a careful balancing of the interests of competing users.

The most recent development in BLM's history was the December 1982 signing of Secretarial Order 3087, which merged the onshore minerals responsibilities of the Minerals Management Service and the BLM. The Bureau now has a much expanded role in the management of onshore mineral resources, including responsibilities for enforcement of postlease laws and regulations for exploration and mining operations on Federal and Indian lands. This operational function includes exploration and mining plan approval and monitoring, production verification, and all engineering and geologic aspects related to operations on Federal and Indian lands.

D. CURRENT RESOURCE DEMANDS AND MANAGEMENT EXPECTATIONS

The creation of a comprehensive legislative mandate (FLPMA) came at a time when demands on the resources of the public lands were increasing rapidly. The growing inaccessibility of basic commodities, a gradual shift in the demographic center of the Nation to the West and South, increasing national affluence, more leisure time, and an appreciation of environmental values all have intensified pressures on the public lands. These uses are for sometimes competing purposes such as energy production, wildlife habitat, urban growth, wilderness preservation, and recreation, as well as the traditional uses such as livestock grazing, timber production, and mining.

1. What the Public Wants from BLM

The Bureau of Land Management continues to ask the public to express their needs from and their expectations for the public lands. BLM has contacted Governors, State officials, State and regional interest groups, county and local officials, and individuals asking them to identify both public land needs and problems with public land management and to suggest opportunities and priorities for the 1980's.

Improving the productivity of the public lands is often identified as a high priority, with particular emphasis on increased energy production. The public also wants BLM to manage the public land resources (rangeland, forests, energy and minerals, etc.) with sensitivity to social, economic, and environmental impacts.

The public wants assurance from BLM that its minerals are leased with public participation and consideration of environmental concerns, and that fair market value is received for those resources. Exploration and mining operations are to be conducted in accordance with sound ecologic, engineering, and environmental practices. In addition, the public wants to be assured that development of Federal mineral resources is conducted in a manner that maximizes recovery while protecting the resources that remain, and that royalties are paid on a timely basis for Federal minerals that are produced.

Improving Bureau methods for protecting resource values threatened by changes in land use is an important goal. This can be achieved by identifying potentially adverse impacts associated with changes in the use of public lands, and developing and implementing measures to manage and protect threatened resource values such as wildlife, cultural or historic sites, and unique natural areas.

Through a multi-discipline planning process, BLM is providing timely decisions that result from careful consideration of State and local concerns and priorities as well as effective public participation. The Bureau has developed methods for resolving conflicting uses, policies, and procedures that involve the public in the resolution of the potential impacts of alternative land uses. In addition, public land use decisions reflect the social and economic needs of communities and individuals.

2. Mandated Responsibilities

As interest in and demands on the resources of the public lands have increased, so too have Congressional, Judicial, and Executive mandates for more intensive management, improved protection, and expanded services. Many of these mandates have

specific schedules and deadlines for completion. Recent notable legislative mandates include:

- a review of certain withdrawals of public land in 11 Western States made prior to October 21, 1976, to be completed by 1991;
- offering oil and gas leases in the National Petroleum Reserve in Alaska.
- reports to Congress by December 31, 1985, on the current grazing fee formula and on the Experimental Stewardship Program; and
- a review of potential wilderness areas to be completed by 1991.

Judicial mandates that have had the greatest impact on the Bureau's management responsibilities include:

- 144 Environmental Impact Statements (EIS's) for livestock grazing on 170 million acres of public rangeland by 1988;
- EIS's on forest management in Oregon and portions of California and Idaho by 1982 (extended to 1983); and
- public land designations as specifically open or closed to off-road vehicle use by the end of 1987.

Also, numerous recent Executive Orders have mandated a variety of special surveys and inventories of, for example, cultural, wildlife, wetlands, and endangered species resources prior to permitting the use of public land for development.

In order to comply with all these public demands and statutory requirements, it became imperative that BLM establish a flexible, integrated, and responsive management system.

E. THE DEVELOPMENT OF A RESPONSIVE MANAGEMENT SYSTEM

The Bureau's budget and its functional organization are divided into programs designed to address one or more resource management objectives such as energy and minerals management, range management, and forest management. When statutory, judicial, or administrative mandates change, BLM is often expected to shift available funding and personnel resources rapidly from program to program to adjust to new demands.

When it drafted FLPMA, Congress recognized that public land management is not simply a matter of administering a series of programs to address isolated problems and issues. The central reality of public land management stems from the nature of the lands themselves. BLM manages an intricate

combination of natural resources—from coal to caribou, watershed to cultural resources—which interlock in a system wherein change in the use of one almost invariably means change in another. FLPMA prescribes a management approach which reflects the sensitivity and complexity of these multiple uses. BLM has developed and implemented a management system to meet this FLPMA mandate and to guide its decisions and actions. There are four key elements in this management system:

- a planning and decisionmaking process that provides a balance among the range of alternative uses, includes public input, and directs BLM's implementation activities;
- implementation of land use plans, particularly by making on-the-ground improvements that increase productivity and resource values on the public lands;
- monitoring of resource conditions on the public lands to determine the effectiveness of a wide range of activities; and
- service, operations, and maintenance activities to meet the public's needs and to provide cost effective protection of existing investments.

A key to understanding BLM's operation is to realize that a decision made to delay or expedite one BLM program, one resource, or one element of BLM's management system necessarily affects and involves other BLM programs and resources as well. Under existing statutes and Executive Orders, for example, BLM cannot issue a coal lease, approve a transmission route, or construct a range improvement project before impact assessment work is completed. Similarly, BLM cannot designate a special environmental area or permit off-road vehicles to use a particular area without first considering how other resources in the area will be affected and what other uses might be made of the land.

BLM's management process is designed to resolve many of the conflicting demands placed upon the public lands and to facilitate the development of needed resources while protecting other resource values from inadvertent damage or destruction. Recent appropriation requests have reflected a strong commitment to this balanced multiple use management approach.

F. BLM's BUDGET

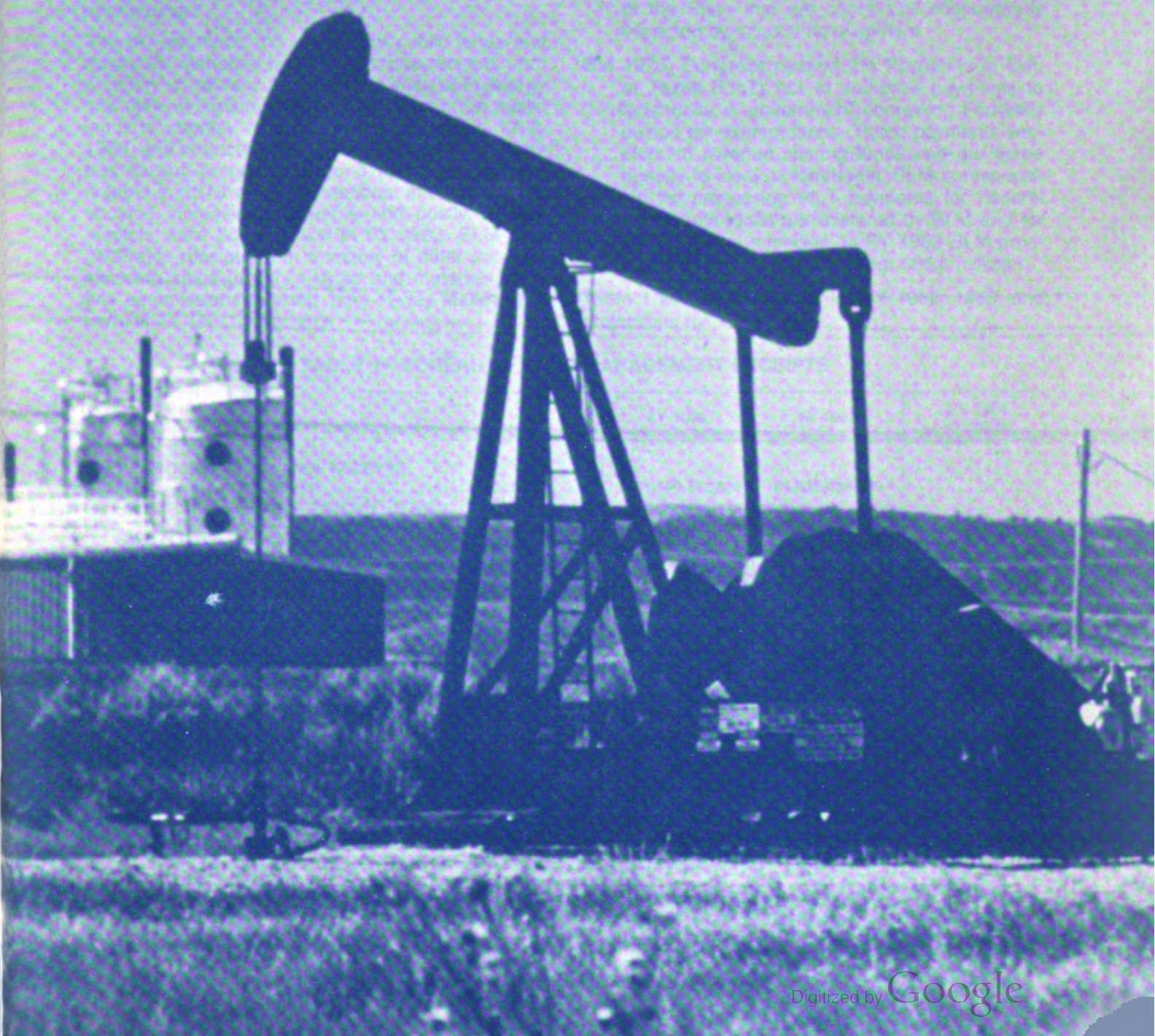
The BLM program is funded through six major operating appropriations, several minor permanent and trust appropriations, and reimbursements from other Federal agencies for work performed on their behalf. In addition, the BLM Budget includes one

annual appropriation and numerous permanent appropriations that provide funds to state and local governments in which Federal land resources are located, either as payments-in-lieu of taxes or as shared revenues from the sale, leasing, or disposition of resource commodities.

A history of the total funding available to BLM since FY 1980 includes the following, recorded in millions of dollars:

	FY 1980	FY 1981	FY 1982	FY 1983
BLM Operating Appropriations.....	435.6	491.3	502.0	427.9
Payments-in-Lieu of Taxes.....	108.0	103.0	95.5	96.3
Permanent Payments to States, etc.....	370.6	433.8	637.7	579.8
Other Miscellaneous.....	4.6	7.3	4.9	6.4
Total	918.8	1,035.4	1,240.1	1,110.4

II. Revenues and Receipts



II. REVENUES AND RECEIPTS

The Bureau of Land Management is a primary collector of revenues. Gross receipts from the lease, use, and sale of public lands and resources totaled approximately \$1.2 billion in FY 1983. Of this amount, \$506.5 million will be returned to the States, \$361.7 million was given to the Reclamation fund, \$143.2 million was given to other Federal agencies, and the remaining \$176.8 million went into the general fund of the U.S. Treasury. By comparison, only \$400 million was appropriated from the Treasury to BLM for operating expenses in FY 1983. This is a ratio of \$3 collected for every \$1 appropriated.

The development and use of the public lands and resources managed by BLM generate receipts from a variety of sources. Accelerating interest in energy and mineral exploration and development on public lands is strongly reflected in the increasing 1982, 1983, and projected 1984 receipts from BLM's mineral leasing programs; a trend that became most notable in 1973 when international energy supplies became increasingly unstable and costly. Timber receipts were \$87.4 million in FY 1983. BLM also generates receipts from a variety of other sources, including sales of public lands and materials, fees and commissions, grazing, right-of-way leases, and permits.

Receipts from the development and use of public land resources were allotted in FY 1983 under a variety of public land payment programs as follows:

- The Federal Coal Leasing Amendments Act of 1975 amended the Mineral Leasing Act to raise the share of mineral leasing receipts returned to the States from 37.5 percent to 50 percent. FLPMA amended the Mineral Leasing Act to provide that these funds may be used for any purpose a state legislature directs, with priority to be given to the political subdivisions of the State that are socially or economically impacted by mineral development.
- In 1976, Congress passed the Payments in Lieu of Taxes (PILT) Act to authorize payments to local units of government containing Federally owned tax-exempt lands. These payments supplement revenue sharing funds and are made directly to local governments. BLM is responsible for processing PILT payments for Federal entitlement lands administered by BLM and six other Federal agencies. In FY 1983 BLM processed payments totaling about \$95.8 million.

Table 1 lists BLM receipts for FY 1982, 1983, and projections for 1984:

TABLE 1—BUREAU OF LAND MANAGEMENT RECEIPTS

	FY 1982	FY 1983	FY 1984 Estimated
STATEMENT OF PUBLIC LANDS RECEIPTS			
Mineral Leases and Permits	\$1,420,568,838	\$1,035,438,889 ¹	--
Sales of Public Lands & Materials (includes Burton-Santini Act sales in Nevada).....	3,598,726	11,528,300	18,112,000
Sales of Public Timber.....	6,346,266	7,585,749	11,500,000
Simultaneous Oil and Gas Filing Fees	--	-- ²	112,500,000
Fees and Commissions	4,427,619	2,342,319	2,290,000
O&C Lands (Timber Sales).....	78,596,218	94,428,391	115,000,000
Coos Bay Wagon Road Lands (Timber Sales).....	2,458,116	4,835,909	3,400,000
Grazing Fees	20,878,691	16,699,399	14,929,000
Rights-of-Way	1,299,440	1,942,446	1,600,000
Miscellaneous Leases and Permits.....	81,617,788	410,532	410,000
Nonoperating Revenue ³	8,655,510	10,909,780	14,200,000
Other ⁴	512,855	586,849	1,127,000
Rent of Land.....	1,323,897	1,456,887	512,000
Total	\$1,630,283,964	\$1,188,165,449	\$295,580,000
ALLOCATIONS OF PUBLIC LANDS RECEIPTS			
States and Counties	653,708,484	506,487,975	49,511,000
Reclamation Fund.....	487,530,908	361,663,767	13,437,000
Indian Trust Fund	5,274	61,488	0
General Fund.....	489,039,298	319,952,219	232,632,000
Total	\$1,630,283,964	\$1,188,165,449	\$295,580,000

¹Function transferred to Minerals Management Service in FY 1984.

²Commencing FY 1984, simo filing fees shown as a new category for revenue; prior years revenues consolidated in Mineral Leases and Permits.

³ Incidental receipts from fines, taxes, etc., which are unrelated to routine public land administration.

⁴ Receipts from miscellaneous materials sales under the Materials Disposal Act.

III. State and Local Shares



III. STATE AND LOCAL SHARES

The Bureau of Land Management's most direct fiscal impact upon public land States and localities is through revenue sharing and other direct payments. In the decade 1973 through 1983, state and local governments in the public land States received \$3.7 billion from BLM as their share of revenues collected from the lease or sale of public lands resources and as in-lieu payments for tax-exempt lands. The amount of money going to these States each year rose from \$103.9 million in 1973 to \$507 million in 1983.

A. REVENUE SHARING

Receipts are generated from mineral leasing and production (royalties), grazing fees, timber sales, and other user fees.

The dominant source of revenue is the energy mineral leasing program. Actual onshore mineral receipts amounted to \$822 million in 1981, \$1.4 billion in fiscal year 1982 and \$1.0 billion in 1983. Table 2, on the distribution of BLM receipts to states during Fiscal Year 1983, indicates the sources of revenue sharing and shows the dominant contribution of mineral leases.

Each State in the lower 48 receives 50 percent, and the State of Alaska 90 percent, of all mineral leasing revenues collected from public lands within its boundaries. The State of Alaska will receive 50 percent of revenues received from the National Petroleum Reserve-Alaska (NPR-A).

The Federal Coal Leasing Amendments Act of 1975 amended the Mineral Leasing Act to raise the States' share of Federal mineral receipts from 37.5 percent to 50 percent. An amendment to the Mineral Leasing Act by FLPMA liberalized the use of these funds, stating that they may be used for any purpose a state legislature directs, with priority to be given to the State subdivisions that are socially

or economically impacted by development of minerals leased under the Mineral Leasing Act.

B. PAYMENTS IN LIEU OF TAXES

Local government units within States in the West are the principal beneficiaries of the 1976 Payments in Lieu of Taxes Act. This law was passed to provide Federal payments to those areas where large portions of land are in Federal ownership and, therefore, are exempt from local property taxes. Serving as a supplement to revenue sharing funds, Payments in Lieu of Taxes (PILT) are made directly to local governments and may be used for any governmental purpose.

Lands eligible for PILT consist of federally owned lands in the National Forest System and the National Park System, lands administered by BLM, lands dedicated to the use of federal water resource development, dredge disposal areas under the jurisdiction of the Army Corps of Engineers, and effective as of FY 1979, National Wildlife Reserve Areas, inactive and semi-active Army installations, and certain lands donated to the United States Government. The Act specifically prohibits payments for lands (but not certain donated lands) that were tax exempt before being acquired from state or local governments.

The PILT computation process requires each State to submit data on the amount of revenue sharing funds received by units of local governments in the preceding fiscal year. This amount is then deducted from the PILT payments for the current year. In Fiscal Year 1983, \$164.8 million was deducted from PILT payments as a result of the revenue sharing provision.

Since PILT payments were started on September 30, 1977, more than \$705 million has been paid to the States; about \$96 million of that amount was paid in FY 1983. Table 3 lists PILT payments to the States in FY 1981, 1982, and 1983.

TABLE 2—PAYMENT OF BUREAU OF LAND MANAGEMENT RECEIPTS TO STATES AS OF SEPTEMBER 30, 1983

States	Mineral Leases and Permits	Forage Receipts Outside Taylor Grazing Districts	Forage Receipts Inside Taylor Grazing Districts	Sale of Public Land and Timber	Other	Total
Alabama.....	379,222	00	00	660	00	379,882
Alaska	48,169,554	00	00	6,326	00	48,175,880
Arizona.....	4,294,975	128,468	103,078	2,681	00	4,529,202
Arkansas.....	579,454	00	00	00	00	579,454
California.....	35,829,205	139,976	31,840	35,329	00	36,036,350

**TABLE 2—PAYMENT OF BUREAU OF LAND MANAGEMENT RECEIPTS TO STATES AS OF
SEPTEMBER 30, 1983—Continued**

States	Mineral Leases and Permits	Forage Receipts Outside Taylor Grazing Districts	Forage Receipts Inside Taylor Grazing Districts	Sale of Public Land and Timber	Other	Total
Colorado	33,648,997	43,891	113,831	29,599	00	33,836,318
Florida	46,802	00	00	00	160	46,962
Idaho	4,346,244	35,108	283,970	12,351	00	4,677,673
Kansas	1,010,285	117	00	00	00	1,010,402
Louisiana.....	708,718	00	00	00	00	708,718
Michigan.....	69,916	00	00	00	00	69,916
Mississippi	7,419,425	00	00	00	00	7,419,425
Minnesota	00	00	00	87	00	87
Montana.....	18,488,530	167,266	171,302	9,240	579,662	19,416,000
Nebraska	258,917	1,167	00	00	00	260,084
Nevada.....	12,184,632	34,803	406,567	70,402	00	12,696,404
New Mexico.....	131,240,911	223,491	335,817	12,363	21,125	131,833,707
North Dakota...	9,177,260	9,152	00	00	00	9,186,412
Oklahoma	2,024,918	326	00	00	5,543	2,030,787
Oregon	5,105,221	44,789	196,710	*40,042,475	00	45,389,195
South Dakota ..	1,525,838	64,118	00	961	00	1,590,917
Utah.....	36,162,287	00	238,732	14,672	1,610	36,417,301
Washington.....	823,438	26,588	00	13,397	00	863,423
Wyoming.....	180,720,075	437,167	283,021	24,180	00	181,464,443
Total.....	534,214,824	1,356,427	2,164,868	40,274,887	607,940	578,618,946

*The majority of the \$40 million is for timber receipts.

**TABLE 3—SUMMARY OF PAYMENTS IN LIEU OF
TAXES BY STATE**

	FY 1982	FY 1983
ALABAMA.....	\$112,030	\$114,758
ALASKA.....	3,475,036	3,671,945
ARIZONA.....	7,684,920	7,571,230
ARKANSAS.....	1,195,865	1,282,652
CALIFORNIA.....	10,860,626	10,123,180
COLORADO.....	6,608,468	6,978,006
CONNECTICUT	12,208	14,527
DELAWARE.....	4,520	4,360
DIST. OF COLUM.....	5,600	5,831
FLORIDA.....	1,756,841	1,715,928
GEORGIA.....	713,699	758,293
GUAM.....	211	753
HAWAII.....	9,774	10,022
IDAHO.....	6,868,043	7,065,943
ILLINOIS.....	281,411	268,243
INDIANA.....	262,617	222,273
IOWA.....	117,595	120,577
KANSAS.....	331,418	318,425
KENTUCKY.....	659,544	669,904
LOUISIANA.....	160,958	172,254
MAINE.....	38,798	47,385
MARYLAND.....	77,748	55,408
MASSACHUSETTS	76,783	62,441
MICHIGAN.....	1,317,094	1,301,441
MINNESOTA.....	1,045,207	1,043,164
MISSISSIPPI.....	335,393	380,032
MISSOURI.....	527,873	773,646
MONTANA.....	7,213,567	7,292,394
NEBRASKA.....	270,006	276,543

**TABLE 3—SUMMARY OF PAYMENTS IN LIEU OF
TAXES BY STATE—Continued**

	FY 1982	FY 1983
NEVADA.....	5,069,148	5,202,784
NEW HAMPSHIRE	297,586	294,227
NEW JERSEY.....	62,789	53,835
NEW MEXICO.....	8,934,783	9,163,185
NEW YORK.....	149,526	164,312
NORTH CAROLINA	1,153,918	1,180,825
NORTH DAKOTA.....	513,314	519,974
OHIO.....	431,078	370,175
OKLAHOMA.....	711,667	738,160
OREGON.....	2,531,671	2,580,305
PENNSYLVANIA.....	364,256	318,626
PUERTO RICO.....	2,597	13,799
RHODE ISLAND.....	0	0
SOUTH CAROLINA.....	102,690	119,797
SOUTH DAKOTA.....	1,613,128	1,749,807
TENNESSEE.....	525,563	615,156
TEXAS.....	1,362,537	1,234,734
UTAH.....	7,929,891	8,156,154
VERMONT.....	59,887	108,471
VIRGINIA.....	1,268,268	1,173,547
VIRGIN ISLANDS.....	19,255	20,813
WASHINGTON.....	1,594,873	1,438,969
WEST VIRGINIA.....	754,481	766,909
WISCONSIN.....	543,490	542,842
WYOMING.....	6,973,505	7,019,336
TOTAL.....	\$94,993,754	\$95,868,300

IV. BLM Operating Programs



IV. BLM OPERATING PROGRAMS

INTRODUCTION

The following sections summarize BLM's activities in fiscal year 1983. Activities between the close of the fiscal year and the publication of this report will be summarized in the FY 1984 report. Each program chapter has five parts: (1) a brief program description; (2) a progress report; (3) a description of

public issues associated with the program; and (4) a section on budget. The FY 1983 appropriation level (see budget sections) was adjusted to include enacted supplementals (including pay) and Minerals Management Service transfers. The appendix provides a brief description of the organizational structure of BLM.

A. Resource Management Planning



A. RESOURCE MANAGEMENT PLANNING

a) Program Description

The Federal Land Policy and Management Act (FLPMA) directed BLM to develop land use plans for all public lands. Responding to this new requirement, BLM developed comprehensive resource management planning regulations which became effective on September 6, 1979. Since that time, BLM has begun to develop procedures and processes to implement those regulations and provide for an orderly transition from its old planning system, Management Framework Plans (MFP's), to its new system, Resource Management Plans (RMP's).

Additionally, BLM has amended the planning regulations to help shorten time frames, reduce costs, make the process more responsive, and give a new, more active role to state governments. The regulations became effective July 5, 1983.

The resource management planning process is the core of BLM's resource management decisionmaking. It provides for interdisciplinary planning for the public lands and their resources. These plans form the basis for making decisions on the protection and management of critical areas and the allocation of public lands among uses or levels of use. The planning schedule, which is published annually, is a key feature of the program and is designed to facilitate public participation.

A few examples of decisions made through this system include determining which lands will be:

- acceptable for further consideration for coal leasing;
- available for oil and gas, oil shale, and other energy developments;
- suitable for transfer to or exchange with State and local entities, or for sale to the private sector;
- available for timber production;
- recommended as suitable or unsuitable for the National Wilderness Preservation System;
- selected for special attention as Areas of Critical Environmental Concern; and
- available for off-road vehicle use.

All plans begun in Fiscal Year 1980 and thereafter are being developed under the FLPMA regulations. The regulations provide for completing any MFP's already underway and in different stages of development when the regulations were published. Accordingly, on December 3, 1979, a notice was published in the *Federal Register* indicating those por-

tions of the new regulations that will apply to ongoing plans.

Additionally, BLM intends to make maximum use of the plan amendment process. Use of the amendment process with existing MFP's accelerates the response time of the planning process to new proposals, developments, or policies. This management tool will effectively meet program requirements such as energy development that need immediate attention.

b) Progress Report

BLM completed the first RMP in FY 1983 in the Glenwood Springs Resource Area, Glenwood Springs, Colorado. Twenty-one additional RMP's are scheduled for completion in FY 1984.

BLM also prepared a set of draft manual sections for Resource Management Planning. This guidance, to be issued in FY 1984, is intended to assist field offices in implementing the regulations efficiently and effectively.

A comprehensive Communication/Training Program was launched in late August 1982 with the issuance of a *Reference Guide to Pilot RMP Experiences*. The program is proceeding on schedule. Several reference guides, planning aids, and other guidance are planned for FY 1984.

In FY 1981 a Social and Economic Program was established in the Planning Office to develop guidance leading to more socially responsive and economically efficient decisions. The 2-year Coal Social Effects Project was completed in late FY 1982, resulting in a *Guide to Social Assessment*, a *Review of the Literature*, 10 community studies, and a *Summary Research Report*. A training program on the *Guide to Social Assessment* was pilot tested in FY 1983, and additional training is anticipated.

A *Reference Guide to Social and Economic Techniques* was prepared in FY 1982 and was issued early in FY 1983 as the second in the Reference Guide series. A *Multiple Use Questionnaire Package* is being assembled and is intended to be issued as a Reference Guide in late FY 1984 following approval by OMB. In addition, initial efforts at investigating, researching, and formulating a social and economic mitigation policy were begun in FY 1983, and a final policy and Reference Guide are scheduled for FY 1984.

c) Issues

The primary emphasis in FY 1984 will be to share the experiences of the first RMP's through the Communication/Training Program to improve the quality of RMP's being prepared.

d) Budget and Performance Analysis

l) Administrative Responsibility

Program Administrator: Deputy Director, Lands and Renewable Resources

Field Administrators: State Directors

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	8,661	8,704	8,891

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	8,278	8,521	8,891
Work Years	244	234	230

4) Performance

Work Units (by number completed)	1982 Actual	1983 Actual	1984 Planned
Resource Management Plans	0	1	21
Transition Management Framework Plans	36	24	3
Plan Amendments	5	35	29
Interagency Plans	6	0	1

B. Energy and Minerals



B. ENERGY AND MINERALS

B.1. GEOLOGY AND MINERAL RESOURCES

a) Program Description

Geology and Mineral Resources consists of several programs, including mineral classification and assessment, paleontology, hazardous materials, and groundwater. Input on minerals, inventory, and geology is provided to other programs such as mineral leasing, withdrawal, wilderness, and land sales and exchanges, as well as being used in land use planning.

The paleontology program is intended to provide management and protection of the fossil resources occurring on public lands. The BLM's role in managing paleontologic resources involves the use of existing data to determine what paleontologic resources are present and which ones require attention or protection.

A major part of BLM's assessment function is the Geology, Energy, and Minerals Program (GEM), which uses existing mineral information from inventories, computerized data bases, and various published sources to provide mineral information for BLM programs. New information is gathered by BLM personnel, other agencies, and through contracts. The BLM's role in providing and using mineral information is mandated by FLPMA for land use planning. BLM continues to work with the U.S. Bureau of Mines and the U.S. Geological Survey to assure that minerals information is shared and studies are not duplicated between the Agencies.

The objectives of the Groundwater Program are to see that BLM complies with State and Federal requirements regarding the use and protection of groundwater. This program operates under the mandate of FLPMA, the Clean Water Act, Safe Drinking Water Act, and Resource Conservation and Recovery Act. The BLM is concerned with the effect of groundwater on mineral development, the effect of mineral development on groundwater, and protection of aquifers when possible.

Mineral land classification was one of the main missions of the U.S. Geological Survey as stated in the Survey's Organic Act of 1879. The function was transferred to BLM in the merger with the Minerals Management Service's onshore program in April 1983. Geological, geophysical, and engineering data are collected and compiled to classify lands that are prospectively valuable for the occurrence of leasable minerals, and to delineate the boundaries of areas containing leasable minerals that are presently or potentially producible and designate

them as known leasing areas (KLA's). KLA's are then subject to competitive leasing.

The BLM prepares and reviews its classification criteria from time to time in order to make the classification actions uniform and objective. To identify which lands are underlain by leasable minerals within the limits set by the classification criteria, BLM geologists prepare geologic maps, collect samples, and make laboratory analyses to determine the quality or grade of a mineral commodity.

Development of the Hazardous Materials Program continued in FY 1983 and will proceed through FY 1984 as Hazardous Materials Management. The program will be designed by BLM in conjunction with applicable State and Federal laws. The Resource Conservation and Recovery Act and the Comprehensive Response Compensation and Liability Act are two of the laws under which BLM expects to operate for hazardous materials. Hazardous materials is not only a minerals issue; it includes lands, forestry, range, and other BLM programs.

b) Progress Report

Proposed rulemaking, published in August 1982 and due to be published in revised form in spring 1984, will assist in stabilizing BLM's Paleontology Program and providing a means to manage and protect fossil resources effectively.

The BLM is striving to make lands available for mineral exploration and development through public comment and review of past actions affecting land availability. Included in this effort are the areas of critical mineral potential program, withdrawal application and renewal review, and resource management plan review. Also, a de facto mineral withdrawal inventory of leasable mineral lands commenced in FY 1983.

To assist BLM in evaluating mineral resources, six contracted regional studies were completed during FY 1983. Studies of Geology, Energy, and Minerals were completed by BLM personnel for areas where minerals issues were identified during the land use planning process. The information available for analysis has been greatly enhanced during FY 1983 by the merger of MMS and BLM. Oil and gas well logs, the results of solid leasable mineral exploration, and a multitude of geological and geophysical reports are now easily accessible for analysis in support of land use planning.

The BLM is developing groundwater guidelines that will provide technical guidance to be used within

the planning process for the identification and use of existing groundwater data. These guidelines primarily address lands having potential for energy/mineral development and lands affected by hazardous materials issues.

In FY 1983, a total of 1,579,517 acres were added to the Known Geologic Structures (KGS's) in the United States. This brings the total number of acres in KGS's to 24,631,822.

c) Issues

The issues now facing the Paleontology Program are how to effectively manage paleontologic resources on public lands and clarify regulations following the review of approximately 1,200 public comments on a 1982 proposed rulemaking.

The main GEM issue is assuring that adequate mineral data is considered in land management decisions. The BLM provides minerals information for many land management decisions. Most GEM studies are used to answer issues raised in the land use planning process. The Bureau also continues to encourage the public to provide the GEM program with minerals data through participation in the wilderness study and land use planning processes, as well as through direct contact with BLM minerals personnel.

Other issues are to manage and protect groundwater on public lands and to provide access to these resources for mineral development in a safe manner that complies with State and Federal laws. At present BLM is developing much-needed guidance in technical areas.

Assuring that classification is up to date so that BLM will receive fair market value for lands that should be leased competitively rather than noncompetitively is an important issue.

The safety of BLM personnel when dealing with hazardous materials is of prime concern, as are future costs of cleanups, location and verification of sites, and natural resource damage assessments.

d) Budget and Performance Analysis

Geology and Mineral Resources is funded under the eight Minerals subactivities.

B.2 INSPECTION AND ENFORCEMENT

a) Program Description

Terms of the Federal Oil and Gas Royalty Management Act of 1982, Public Law 97-451, require the

Secretary to "enforce effectively and uniformly existing regulations under the Mineral Leasing Laws providing for inspection of production activities on lease sites on Federal and Indian Lands." At year end 1982, 145,365 oil and gas leases were under supervision of BLM on Federal and Indian lands, of which 18,826 were producible with 42,797 active oil and gas well completions. In addition, 4,382 applications for permits to drill were approved and 3,239 new oil and gas wells were started. Approximately 20 percent of the producible leases and 12 percent of the total leases are on Indian lands. Although not conducted under the authority of FLPMA, this activity is included as a vital part of BLM's energy and minerals program.

b) Progress Report

Under direction of the Office of Inspection and Enforcement, a nationwide inspection and enforcement strategy was developed to assure that the performance of oil and gas lessees is properly monitored for reporting production, storage, transportation, disposal of oil and gas, prevention of waste, conservation of resources, detection of trespass, environmental protection, proper abandonment, and compliance with leasing regulations and lease terms. Implementing this strategy requires establishing priority criteria for State inspection plans based on profiles of operator compliance, magnitude of production, environmental risks, public health and safety risks, and other pertinent factors.

Under this strategy, Quality Assistance Teams (QAT's) were established to assure lessee compliance, uniform inspections, and firm but fair enforcement by monitoring oil and gas operations through independent inspections. During FY 1983, 9 QAT inspections were made in 13 Districts in 8 major oil and gas producing States.

To prevent oil theft, final site security regulations were published in the *Federal Register* on July 11, 1983. Proposed rulemaking was published in the *Federal Register* on September 16, 1983, with provisions for assessing civil penalties for certain violations to assure operator compliance through uniform enforcement.

To augment the Federal inspection force, cooperative agreements with various States and Indian tribes are being negotiated for training State and Indian oil and gas inspectors. An ongoing training program is being developed to maintain a full force of Federal inspectors and to increase the professional skills of the inspectors.

During the first three quarters of FY 1983, 12,700 inspections were made, 3,280 incidents of noncom-

pliance were issued, and 365 shut-ins were imposed.

c) Issues

The Onshore Oil and Gas Inventory and Inspection System, known as MS-1, was developed and will be implemented in FY 1984 to improve the quality of the inspection program, reduce inspectors' office time, allow comprehensive oversight of the inspection and enforcement program, and assist in determining inspector resource needs and uses.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Deputy Director, Energy and Minerals

Field Administrators: State Directors

2) Funding

Inspection and Enforcement is funded as part of the oil and gas program.

B.3. OIL AND GAS MANAGEMENT

a) Program Description

Under the terms of the Mineral Leasing Act of 1920, the Mineral Leasing Act for Acquired Lands of 1947, and the Alaska National Interest Lands Conservation Act (ANILCA) of 1980, BLM is responsible for oil and gas leasing on about 520 million acres of public lands and national forests, acquired land, and private land where mineral rights have been retained by the Federal Government. The Department of the Interior Fiscal Year 1981 Appropriations Act authorizes leasing in the National Petroleum Reserve-Alaska.

The U.S. Geological Survey (GS) estimates that the Nation's proven oil reserves amount to about 35 billion barrels, of which about 90 percent are onshore and 4.5 percent are on Federal lands. Total remaining recoverable gas reserves are estimated at 208 trillion cubic feet, of which 83 percent are onshore and 6.1 percent are on Federal lands.

The Mineral Leasing Act provides for both competitive and noncompetitive oil and gas leasing. The differences are described in the chart below. Roughly 97 percent of all Federal leasing is noncompetitive. Currently, the greatest activity in these leases is in Wyoming, Montana, New Mexico, Utah, and Colorado. Individual lessees are limited to a total acreage per State of 492,160 acres: 246,080

acres for public land and 246,080 acres for acquired land in any State, except Alaska where lessees are limited to 300,000 acres in each of the two leasing districts.

In December 1982, the Secretary transferred all functions related to royalty and mineral revenue management, including collection and distribution, from the BLM to the Minerals Management Service (MMS). Additionally, all MMS onshore minerals management functions on non-Indian lands, including resource evaluation, approval of drilling permits and mining or production plans, and inspection and enforcement were transferred to the BLM from MMS. In February, the Secretary's responsibilities for approving and supervising operation of Federal oil and gas leases on Indian Land issued under the Allotted Indian Lands Leasing Act of 1909 and the Unallotted Indian Leasing Act of 1938 also were transferred to BLM.

During 1983, over 2,200 operators were actively engaged in drilling and producing oil and gas from approximately 15,300 Federal leases and about 3,900 Indian leases located in 23 States. Almost all of the production of oil and gas from onshore Federal and Indian lands is located in States west of the Mississippi River. The largest production occurs in Wyoming and New Mexico, with Montana, North Dakota, Colorado, Utah, California, and Alaska also contributing significant amounts.

The major functions of the oil and gas operations program are:

- To select tracts for competitive leasing, conduct lease sale, and accept or reject bids tendered.
- To offer lands for simultaneous oil and gas leasing, receive applications, conduct drawing to establish priority, and provide security against abuse of the program.
- To open lands to over-the-counter noncompetitive leasing and process applications to lease.
- To issue all onshore oil and gas leases properly applied for under the Mineral Leasing Act, the Mineral Leasing Act for Acquired Lands, and ANILCA; receive application fees and rentals; approve assignments; and conduct adjudicative actions as necessary.

Oil and Gas Leasing

	Noncompetitive Leases	Competitive Leases
Leasing Method ¹	Over the counter (OTC) to the first qualified applicant. When these leases expire or otherwise terminate they are reoffered by lottery through the Simultaneous Oil and Gas Program (SOG).	Sealed bid issued on a bonus bid basis ²
Location	Outside a Known Geologic Structure (KGS) ³	Inside a Known Geologic Structure (KGS) ³
Size	Up to 10,240 acres	Up to 640 acres in Continental U.S.; up to 2,500 acres in non-North Slope Alaska; and up to 60,000 acres in NPR-A
Annual Rental	OTC: \$1 per acre. SOG: \$1 per acre first 5 years, \$3 per acre thereafter.	\$2 per acre in Continental U.S. and non-North Slope Alaska; \$3 per acre in NPR-A
Lease Period	Ten years, but can be extended when production is established ⁴	In NPR-A 10 years, elsewhere: five years, but can be extended when production is established ⁴
Royalties on Production	12.5 percent on oil and gas	12.5 to 25 percent on oil; 12.5 to 16.66 percent on gas; 16.66 percent in NPR-A FY 82 lease sales on oil and gas

¹Leasing in NPR-A is on a competitive basis only, and bidding systems are those allowed in the OCS Lands Act Amendments of 1978. ² A bonus is the per-acre cash amount an applicant bids on a lease tract. The lease is issued to the applicant with the highest bonus bid. ³Favorable Petroleum Geologic Province (FPGP) in non-North Slope Alaska. ⁴Can also be extended if other statutory conditions exist, such as drilling or reworking operations on the last day of the primary term of a lease exist.

b) Progress Report

Oil and gas leasing regulations found at 43 CFR Groups 3000 and 3100 were revised on July 22, 1983. The revised regulations reduce the regulatory burden imposed on the public and provide access to public lands in Alaska for oil and gas exploration and development.

During FY 1983, a total of 13,957 leases containing 19,998,768 acres were issued, including 132,916

acres by competitive bidding, 9,966,405 acres by simultaneous oil and gas leasing, and 9,889,446 acres by the over-the-counter leasing method.

The final programmatic EIS for oil and gas leasing in the National Petroleum Reserve, Alaska (NPR-A) was published in March 1983, followed by the third NPR-A lease sale on July 20, 1983. Of the 84 tracts containing 2,195,845 acres offered, high bids totalling \$16,725,660 were received on 18 tracts containing 419,618 acres. Three NPR-A leases that had been offered at a prior lease sale during FY 1982 were issued during FY 1983 and received bids that were initially rejected. The decision to reject the bids was appealed and subsequently remanded by the IBLA for reconsideration.

In FY 1983, 2,969,659 acres were opened for leasing in the Denali, Tielke, and Slana leasing areas under the Alaska National Interest Lands Conservation Act (ANILCA). During the year, 414 leases on 1,654,738 acres were issued.

Provisions for reinstatement of oil and gas leases at title IV of FOGPMA have been implemented through internal instruction to field offices. Regulations implementing the provisions of title IV have been developed and will be released during FY 1984.

The consolidation of forms for the assignment of various types of interests in geothermal and oil and gas leases was begun in FY 1983, as was the development of a consolidated oil and gas application to lease and lease form. This action will reduce the paperwork burden on both the public and BLM.

The backlog of pending oil and gas lease applications has remained nearly zero throughout FY 1983 in contrast with the backlog of more than 13,400 cases that existed in January 1982.

By the close of FY 1983 nearly all oil and gas cases had been entered into the Automated Lands and Minerals Records System (ALMRS). This automated system allows BLM to more efficiently manage the leasing program and will provide the public with more readily accessible information.

Oil and gas unit operation regulations at 30 CFR 226 were revised on June 10, 1983. These rules, along with the general oil and gas operating regulation of 30 CFR Part 221, were transferred to 43 CFR Group 3100 as Parts 3180 and 3160, respectively, on August 12, 1983.

New drilling activity on Federal and Indian lands has continued at a high level since about 1974. Between 2,500 and 3,500 new wells were drilled each year, resulting in completion of 1,500 to 2,000 new producible wells each year. When the total statistics for FY 1983 are tabulated, in spite of a general nationwide decline, an estimated 2,000 new wells

will have been completed for production on Federal and Indian lands.

As of March 31, 1983, there were 21,534 oil completions and 14,475 gas completions on Federal land, and 4,857 oil completions and 3,225 gas completions on Indian land for a grand total of 44,091 producible completions and another 7,004 service wells for which BLM is responsible. Production from these wells consistently has been slightly over 5 percent of the total domestic oil production and slightly over 6 percent of domestic gas production.

c) Issues

The question of leasing and drilling in wilderness study areas attracted public and congressional attention during FY 1983. Oil and gas leases are only to be issued in BLM wilderness study areas on lands adjacent to producing oil and gas fields or areas that are prospectively valuable. Leases can only be processed with a no surface occupancy stipulation, with entry allowed only if the lands are accessible by directional drilling or other nonsurface disturbing method from outside the BLM WSA.

Oil and gas operators express concern that applications for permit to drill continue to be processed in a timely manner, allowing access to lands already under lease so they can begin their exploratory or developmental work. Such timely access is critical to industry in planning their work. In the same vein, operators are expressing concern that associated applications such as for unitization, communitization, National Gas Policy Act determinations, well workovers, rights-of-way, and installation of production equipment also are processed promptly. Conversely, many interest groups, as well as state and local governmental units and tribal officials are expressing concern that their interests must be accorded a high priority in the decisionmaking process and that they should have direct involvement during consideration of the oil and gas development projects.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Deputy Director, Energy and Mineral Resources

Field Administrators: State Directors

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	17,859	28,666	37,267

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	17,547	28,556	37,267
Work Years	585	860	946

4) Performance

	1982 Actual	1983 Actual	1984 Planned
Leases Issued.....	20,100	13,957	20,000
Assignments	47,029	45,000	45,000
Simultaneous Oil and Gas Lease Applications Proc- essed (in millions).....	1.5	1.1	*.4
Applications for Permit to Drill Processed.....	5,195	3,687	4,500
Review of Other Operator Proposals.....	20,570	21,125	22,650
Inspections Conducted	29,000	28,000	35,000

*Estimated. Program suspended October 1983; leasing to resume after publication of final regulations.

B.4. GEOTHERMAL PROGRAM

a) Program Description

Under the authority of the Geothermal Steam Act of 1970, BLM issues leases on public, withdrawn, and acquired lands administered by the Departments of the Interior and Agriculture. Leasing within known geothermal resource areas (approximately 2.0 million acres) is based on competitive bidding. Lands not within known areas may be leased to the first qualified applicant. All leases are for 10-year terms and diligent exploration of leases is required.

The merger of post-lease operational supervision into the BLM brought responsibility over all existing and newly issued geothermal leases. The major functions of the program are:

- Review and approval of all applications to conduct operations to assure technical competence, use of the latest state-of-the-art procedures and equipment, and that due consideration is given to resource conservation and environmental protection.
- Inspection of operations to assure compliance with laws, regulations, lease terms, and any conditions specified when approval was granted.

- Assurance that production is handled and measured properly so that royalty due the United States or the Indians is paid on the correct amounts.

b) Progress Report

During FY 1983 approximately 58,000 acres within known geothermal areas received high bonus bids of \$7.2 million. An additional 400,000 acres were leased noncompetitively. Cumulatively, over 5.5 million acres of Federal lands have been leased for geothermal development since the program began in 1974.

During FY 1983 there were 37 geothermal leases capable of production in four States--California, Nevada, New Mexico, and Utah. Only 9 of these leases were in actual production during the year--8 in California and 1 in New Mexico. There were 62 steam wells and 27 hot water wells on the producible leases.

Progress during the year also was made in the area of regulatory reform. Through successive final rule-makings made effective in March, May, and July 1983, the geothermal leasing program was simplified substantially for the public, and 90 percent of the reporting and recordkeeping requirements affecting program participants were eliminated. Regulations pertaining to geothermal operations were transferred from Title 30 CFR parts 270 and 271 to Title 43 parts 3260 and 3280, respectively.

c) Issues

A major issue affecting the geothermal leasing program involves the per State leased acreage limit of 20,480 acres. Legislation to increase the limit has been proposed in each of the last four sessions of Congress, but none of the bills has passed.

Geothermal operators express concern that applications for permits to drill continue to be processed in a timely manner, allowing access to lands already under lease so they can begin their exploratory or developmental work. Such timely access is critical to industry in planning their work. In the same vein, operators are expressing concern that associated applications such as for unitization, communitization, exploration, and installation of utilization equipment be processed promptly.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Deputy Director, Energy and Mineral Resources

Field Administrators: State Directors, especially California, Nevada, and Oregon

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	2,305	2,760	3,197

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	2,100	2,562	3,197
Work Years	61	63	75

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Competitive sales	16	7	5
Competitive leases issued	108	35	20
Noncompetitive leases issued	465	231	225
Power plant licenses	2	1	1
Post-lease actions	157	180	180
Nonelectrical use licenses	0	0	1

(Work units will be added for operations)

B.5. COAL MANAGEMENT

a) Program Description

In the western United States, as much as 60 percent of the coal resource is owned by the Federal Government, principally in the States of Colorado, Montana, New Mexico, North Dakota, Utah and Wyoming. By the end of FY 1983, a total of 655 leases had been issued, covering 950,174 acres of land containing an estimated 18 billion tons of recoverable reserves of Federal coal.

The current Federal coal management program uses comprehensive land use planning to identify areas that are environmentally acceptable for leasing, eliminating from consideration those areas that contain unique site-specific resource values that are clearly more significant than the coal resource. In addition, qualified surface owners are consulted during land use planning to determine whether a significant number have a preference against surface mining. If so, the lands involved may be dropped from further consideration for coal leasing.

Activity planning follows completion of the land use plans and involves ranking and selecting a sufficient number of potential coal leasing tracts within the coal region to meet the regional leasing levels. A Federal/State Regional Coal Team is established in each region and is responsible for ranking and selecting tracts for recommendation to the Secretary for leasing. The Secretary makes his decision after a regional environmental impact statement is completed and each affected State is consulted.

Strong input from industry, other Federal agencies, state and local governments and the public is an essential and integral element of the program. The program also includes "leasing by application" within Federal coal regions under emergency conditions (e.g., where Federal coal would otherwise be bypassed) and outside Federal coal regions where regional competitive leasing is impractical. Other aspects of the program include processing of pending preference right lease applications (PRLA's), processing coal exploration license applications, and action on coal exchanges.

All coal tracts are evaluated prior to lease sale in order to ensure that the Government receives fair market value.

Because of the merger of onshore minerals functions, the BLM now has responsibility for supervising exploration and mining operations on Federal and Indian coal leases. Of the 655 leases in effect, mining operations are being conducted on 186 Federal leases and 7 Indian leases.

The operations responsibility is a sequential process from prelease exploration, to mining activity on a leased tract, to mine abandonments. This responsibility includes approval of exploration and resource recovery plans and the enforcement of Federal coal regulations and lease terms. In conjunction with individual tribes and the Bureau of Indian Affairs, these functions also are carried out on Indian lands.

b) Progress Report

Through the "leasing by application" component of the program, six lease sales were held and six new leases containing approximately 996 million tons of recoverable reserves were issued during the fiscal year. Three PRLA's covering an estimated 39.26 million tons of recoverable reserves also were issued.

Competitive lease sales were held during the fiscal year in two Federal coal regions: the Fort Union and Powder River Regions.

- In October 1982, leases were sold on two tracts in the Powder River Region containing 471 mil-

lion tons of recoverable reserves. High bids for the tracts totaled \$23,689,632.

- Leases on four tracts containing 102 million tons of recoverable reserves in the Fort Union Region were sold in September 1983. High bids totaled \$845,910.

Activity planning for the first round of sales in FY 1984 in the San Juan River Region and the second round of sales in the Green River-Hams Fork, Uinta-Southwestern Utah, and Powder River Regions and the Alabama Subregion continued in FY 1983.

Also during FY 1983, 133 leases were in production, of which 7 are on Indian lands. Additionally, 129 leases were reported as having "activity" which includes preproduction exploration, reclamation or environmental studies, or maintenance in a production-ready status.

c) Issues

In August 1983, the Secretary appointed David F. Linowes to head the Commission on Fair Market Value Policy for Federal Coal Leasing, which was authorized by legislation enacted by Congress.

To complete its mission, the commission will evaluate efforts to improve the Department's fair market value policies and procedures for the coal leasing program and will recommend improvements in the statutes, policies, and procedures governing receipt of fair market value.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Assistant Director, Solid Leasable Minerals

Field Administrators: State Directors, especially Colorado, Montana, New Mexico, Utah, Wyoming, and Eastern States

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	17,947	20,259	18,598

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	16,982	18,783	18,598
Work Years	296	344	360

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Environmental Statements....	3	2	5
Environmental Assess- ments	159	34	67
Trespass.....	19	3	3
Use Authorizations (In- cludes coal leases and exploration licenses)	177	157	213

B.6. OIL SHALE MANAGEMENT

a) Program Description

Efforts to develop oil shale have fluctuated greatly over the past 65 years. World War I prompted a flurry of claim staking under provisions of the Mining Law. During World War II, interest in oil shale resulted in the enactment of the Synthetic Liquid Fuels Act of 1944. Under the Act, the Bureau of Mines began developing extraction technology at Rifle, Colorado, and Laramie, Wyoming. Since then, private industry has taken over refinement and adaptation of technologies.

In 1974, BLM issued four oil shale leases - two in Utah and two in Colorado. The leases were issued as part of the Department's Oil Shale Prototype Leasing Program. One objective of this program was to issue a limited number of leases to stimulate development of commercial oil shale technology by private industry. Another objective was to develop the environmental safeguards, management expertise, and government supervision necessary in a future oil shale industry.

The 25,000-square mile Green River formation in northwestern Colorado, northeastern Utah, and southwestern Wyoming contains oil shale with a total estimated potential of almost two trillion barrels of oil. Of the total area, 17,000 square miles are believed to have deposits greater than 10 feet thick with an average yield of 25 or more gallons per ton, for an estimated 731 billion barrels of commercially developable shale oil. Approximately 83 percent of the formation is in Colorado, 9 percent in Utah, and 8 percent in Wyoming.

Roughly 80 percent of this oil shale is on Federal land. The other 20 percent is in State or Indian ownership or was transferred under the 1872 Mining Law, which governed disposal of minerals on public land before 1920 when the Mineral Leasing Act provided new authority for leasing Federal oil shale lands. In the absence of commercial prospects, however, these lands were withdrawn from mineral leasing and other forms of disposal in 1930. Except for the prototype sale in 1974, there has been no leasing. In 1968, oil shale lands were withdrawn from location of metalliferous minerals (something not done by the 1930 withdrawal) under the Mining Law to preclude legal entanglements.

b) Progress Report

During early FY 1983, BLM proposed regulations to manage Federal oil shale resources. This proposal contained procedures to explore Federal resources; develop land use plans for Federal oil shale; conduct competitive lease sales; obtain bonus, royalty, and rental payments; and manage leases after issuance.

The BLM held public information meetings and hearings to solicit public comments on the proposed regulations. Among other things, the hearing and written comments supported a more highly tiered approach to planning and environmental impact statement preparation than had been proposed.

In response to public concern, BLM is preparing revised proposed Federal oil shale management regulations that contain more analytical tiering, as well as more opportunities for local input to oil shale management and a different royalty payment mechanism. The issuance of these proposed and final regulations are expected in FY 1984.

All four tracts that were leased under the original prototype program are in various stages of development. The two Utah tracts have been unitized and are being managed as one tract. Ground was broken on U-a and U-b in the summer of 1983, and development is proceeding at an expected pace. In Colorado, C-a is in a temporary suspension of operation as of the spring of 1983. C-b is scheduled to receive a maximum loan guarantee and price supports of approximately \$2.19 billion from the Synthetic Fuels Corporation in 1984.

Several industry applications for Federal lands to support ancillary facilities for private oil shale projects are pending. BLM has prepared several environmental impact statements (EIS's) to facilitate this development and accommodate all such requests to allow industry to meet its development schedules. For example, the Chevron oil shale op-

erations in Colorado are scheduled for full production by 1991. The final EIS has been completed for the Chevron project. The Utah State Office published a final basinwide EIS covering all oil shale projects requiring their approval in February 1983.

c) Issues

Development of the fundamental technology of oil shale is well advanced, but still lacks testing at commercial scale. Nevertheless, a wide array of economic, environmental, and some technological uncertainties remain. Congress enacted legislation in FY 1983 concerning off-site waste disposal for one specific prototype lease in Colorado, as well as two smaller private parcels. Experience to date suggests that the current maximum acreage of oil shale leases may be insufficient for commercialization in areas where shale deposits are relatively thin.

d) Budget and Performance Analysis (Oil Shale and Tar Sand Programs)

1) Administrative Responsibility

Program Administrator: Assistant Director, Solid Leasable Minerals

Field Administrators: State Directors, Colorado, Utah, and Wyoming

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	3,675	4,118	2,148

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	3,490	4,070	2,148
Work Years	63	75	50

4) Performance

N/A

B.7. TAR SAND MANAGEMENT

a) Program Description

Nationwide, the United States has an estimated 30 billion barrels of tar sand oil, of which 2 billion barrels

are deemed recoverable with today's technology. Approximately 100 to 200 million barrels can be recovered by surface mining. The rest will probably require some form of *in situ* techniques for recovery. Over 90 percent of the United States' tar sand deposits are in Utah. The 11 major tar sand areas are principally on Federal lands, some of which are intermingled with State lands.

The Combined Hydrocarbon Leasing Act of 1981 was signed into law on November 16, 1981. The primary effect of this legislation was to redefine the term oil to include all nongaseous hydrocarbons except coal, oil shale, and gilsonite. With this change, there is no longer a need in new oil and gas leasing to distinguish between tar sand and oil, which had created sufficient administrative difficulty in the past so as to deter Federal tar sand leasing completely. The Act created a competitive combined hydrocarbon leasing program in the 11 major tar sand areas (referred to as Special Tar Sand Areas-STSA's). It also provided to existing oil and gas lessees and holders of valid claims the right to the hydrocarbons in the 11 STSA's and to convert these leases without competitive bidding to combined hydrocarbon leases.

b) Progress Report

Final regulations governing the conversion of existing oil and gas leases and valid claims to combined hydrocarbon leases were issued in 1982. Regulations governing the competitive leasing program were issued, and final rules were implemented on March 21, 1983. Draft environmental impact statements (Regional, Tar Sand Triangle, and Sunnyside) have been developed, and the analyses of the impacts are due for public comment by the spring of 1984. The EIS's cover amendments to land use plans on the planning areas which encompass the STSA's to allow for potential tar sand development in those areas. It is anticipated that two other EIS's will be initiated in FY 1984.

c) Issues

The Combined Hydrocarbon Leasing Act provided mechanisms for leasing tar sand through the redefinition of oil and through the creation of combined hydrocarbon leases within the Special Tar Sand Areas. Holders of oil and gas leases outside the STSA's who find tar sand on their leases have no mechanism for developing the resource. The only option available for these leaseholders is to relinquish their lease and to try to re-lease the property through the various oil and gas leasing mechanisms.

d) Budget and Performance Analysis

The Tar Sand program was funded as part of the Oil Shale program in FY 1983.

B.8. NONENERGY LEASABLE MINERALS

a) Program Description

As defined by law (Mineral Leasing Act of 1920, as amended and supplemented; Mineral Leasing Act of 1947 for Acquired Lands; and the Reorganization Plan No. 3), the nonenergy leasable minerals are phosphate, potassium, sodium, sulphur, asphalt, gilsonite, and associated minerals; plus chlorides, sulphates, carbonates, borates, silicates, and nitrates on the public domain lands, and all minerals on most acquired lands (locatables or hardrock minerals that are generally in National Forests).

The Mineral Leasing Act provides for both competitive and noncompetitive leasing. However, approximately 95 percent of this program operates through the noncompetitive system. Prospecting permits are issued prior to noncompetitive leases, and discovery of a valuable deposit entitles the permittee to a lease (termed a preference right lease) provided the permittee can meet the terms and conditions and special stipulations that may be attached to the lease. Leases have a 20-year term and can be renewed or readjusted for additional terms. Different rental and royalty provisions apply varying with the mineral involved, but unlike coal or oil and gas, there are no diligent development requirements under these leases.

Solid leasable mineral exploration and mining operations (excluding coal) are being conducted on 359 Federal leases and 67 Indian leases. There are six major sodium (soda ash) mines, seven major potassium (potash) mines, five major phosphate mines, and seven major lead-zinc mines on acquired lands. On Indian lands, one large copper mine, one uranium operation and a large number of sand and gravel operations are in production.

With the merger of onshore minerals functions, the BLM is now responsible for the processing of permit and lease applications, approval of exploration and mining plans, preparation of environmental analyses and EIS's, production verification, and approval of final abandonment plans. In cooperation with the individual tribes and the Bureau of Indian Affairs, the BLM also carries out its supervisory operations functions on Indian lands.

b) Progress Report

Approximately 55 percent of the casework backlog has been eliminated in FY 1983 by the diligent efforts of minerals adjudication staffs throughout the BLM.

Proposed final amendments to the 43 CFR 3500 regulations have been developed and will become final rulemaking in early FY 1984. Additionally, the merger of key components of the Minerals Management Service with the BLM also incorporated their operating regulations 30 CFR 231 into 43 CFR 3570.

A proposed combined mineral lease form was published in the *Federal Register*, and public review and comment was solicited. A final lease form is expected to become effective in early FY 1984.

c) Issues

The amendments to the regulations would streamline the general noncompetitive leasing procedures and enhance public availability for exploration and development. The combined mineral lease form is expected to eliminate the need to stock separate forms for every mineral defined under the Mineral Leasing Act.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Assistant Director, Solid Leasable Minerals

Field Administrators: State Directors

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	1,588	3,324	3,838

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	1,534	3,069	3,838
Work years	31	71	85

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Lease applications processed	144	144	148
Prospecting permits processed	211	211	406
Environmental assessments completed	326	346	400
Inspections/Compliance checks conducted	1,322	1,472	1,472
Exploration/Mining plans processed	210	800	1,000
Mineral reports completed	800	800	1,000

B.9. MINING LAW ADMINISTRATION AND MINERAL MATERIALS

a) Program Description

Mining Law Administration, operating under the authority of the Mining Law of 1872, as amended, encourages the search for and discovery of locatable mineral deposits on public lands by means of a mining claim location and patent system. The discoverer of a valuable mineral deposit has the right to acquire fee title to the acreage of a lode or placer claim. This law continues to apply to all minerals not subject to leasing or sale on all public domain lands.

Until 1976, when the Federal Land Policy and Management Act (FLPMA) was passed, claimants generally filed their location notices and other claim records only with county clerks. As a result, the Federal Government had no official record of the number, location, or identity of claims or claimants. FLPMA, however, requires a claimant to file with BLM a copy of the locations notice and, thereafter, to file annually with BLM evidence of interest to hold the claim.

FLPMA also directs that in managing the public lands, the Secretary shall take any action necessary to prevent unnecessary or undue degradation of the lands. BLM responded to this directive by preparing regulations that govern mining activity on public lands. Regulations that allow mining activities and still prevent impairment of the suitability of lands under wilderness review for inclusion in the wilderness system (43 CFR 3802) were issued in March 1980. Final regulations governing mining activity on public lands other than wilderness study areas (43 CFR 3809) became effective in January 1981.

The primary goal in the salable minerals program is to dispose of mineral materials, such as sand, gravel, and cinders by sale or free use. Associated

with this goal are responsibilities for the inventory and planning necessary for disposals and the prevention of unauthorized use of mineral materials on the public lands.

Mineral materials from the public lands play an important role in supporting energy and mineral development, the construction and maintenance of transportation systems, and the expansion of communities and industries in the Western States. In many western communities, the public lands provide the only source of mineral materials.

The basic authorities for implementation of the mineral materials program are the 1947 Materials Act and the 1955 Surface Resources Act. The Materials Act makes minerals such as sand, gravel, and building stone available for commercial use. They are sold either competitively or noncompetitively. Some sales are made to individuals for exclusive rights to a site. Other sales are made for material from common use areas or community pits. Governmental agencies and nonprofit organizations may be granted such materials at no charge under a free-use permit.

The 1955 Act amended the 1947 Act by stating that certain types of mineral materials ("common varieties") were no longer locatable under the mining laws, but salable under the 1947 Act. It provided for the continued location of mineral materials having distinct and special value.

b) Progress Report

Efforts to reduce the number of pending mineral patent applications resulted in the issuance of 155 mineral patents covering 15,141 acres in FY 1983. This reduced the number of pending mineral patent applications from the FY 1982 level of 412 to 335 at the close of FY 1983. A Notice of Intent to revise the regulations (43 CFR 3700 and 3800) concerning administration of the Mining Law of 1872, as amended, was published in the *Federal Register* in December 1982. Public comments focusing on the definition of discovery of a valuable mineral deposit, assessment work provisions, and mineral patent procedures, among other topics, are being evaluated. Proposed regulations are expected to be published in the *Federal Register* during the first half of FY 1984.

A proposal to amend the mining claim recordation regulations (43 CFR 3833) was published in May 1982, and the final regulations were published in December 1982. The modified regulations clarified ambiguities in the existing regulations, eliminated unnecessary information requirements, simplified the filing process, and adopted a "postmark rule" to permit late receipt of timely mailed filings.

A proposal to modify the surface management regulations (43 CFR 3809) was published in March 1982 and the revised regulations became final in March 1983. The effect of the modifications was to clarify the existing regulations and to eliminate the mandatory filing of a plan for operations on lands in the California Desert Conservation Area that are classified by the Desert Plan as moderate and intensive use areas.

Revised regulations (43 CFR 3600) governing the administration of the BLM's mineral material program were published on June 10, 1983. The revision of these regulations changed the limitations on the disposal of mineral materials from public lands, clarified ambiguities in the previous regulations, and created simplified procedures for the disposal process.

c) Issues

On June 6, 1983, the Supreme Court rendered a decision in *Watt v. Western Nuclear, Inc.* declaring that gravel is a mineral reserved to the Federal Government on lands for which the surface was patented under the 1916 Stock-Raising Homestead Act (SRHA).

The Supreme Court's declaration means that gravel and, by implication other mineral materials on approximately 33 million acres of SRHA lands, will remain in Federal Government possession to be sold to private entities or provided free of charge to government agencies and qualified nonprofit organizations.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Deputy Director, Energy and Mineral Resources

Field Administrators: State Directors

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	8,183	8,631	10,277

FUNDING

	1982 Enacted	1983 Enacted	1984 Proposed
MINING LAW ADMINIS- TRATION			
Appropriation (\$000s)	6,365	6,559	7,302

FUNDING—Continued

	1982 Enacted	1983 Enacted	1984 Proposed
MINERAL SALES			
Appropriation (\$000s)	1,818	2,072	*2,353
URANIUM OPERATIONS			
Appropriation (\$000s)	--	--	622

*Includes \$200,000 funding for the Paleontology and Geology program transferred from the Soil, Air, and Water subactivity.

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	7,614	8,262	10,277
Work Years	250	254	283

PROGRAM OBLIGATIONS

	1982 Enacted	1983 Enacted	1984 Proposed
MINING LAW ADMINIS- TRATION			
Dollars (\$000s)	5,931	6,353	7,302
Work Years	200	201	210
MINERAL MATERIAL SALES			
Dollars (\$000s)	1,683	1,909	2,353
Work Years	50	53	66
URANIUM OPERATIONS			
Dollars (\$000s)	--	--	622
Work Years	--	--	7

4) Performance

MINING LAW ADMINISTRATION

Work Units	1982 Actual	1983 Actual	1984 Planned
Plans of Operation re- viewed.....	559	429	450
Notices reviewed.....	1,708	1,465	2,200
Mineral patent applications processed.....	120	155	155
Mining claims recorded.....	175,436	137,116	150,000

MINERALS MATERIALS

Work Units	1982 Actual	1983 Actual	1984 Planned
Trespass cases processed ...	27	34	34
Compliance checks con- ducted.....	1,687	1,737	1,737
Environmental assess- ments completed.....	368	785	785
Sales contracts issued.....	871	898	898
Free use permits issued.....	461	538	538

MINERALS MATERIALS—Continued

Work Units	1982 Actual	1983 Actual	1984 Planned
Paleontology permits issued.....	--	--	100

MINERALS MATERIALS—Continued

Work Units	1982 Actual	1983 Actual	1984 Planned
GEM assessments (000's acres)	--	--	450

C. Land Programs



C. LAND PROGRAMS

C.1. LANDS

a) Program Description

FLPMA's most sweeping effect was to consolidate and clarify the objectives and procedures governing the management of the remaining unreserved public lands under BLM's jurisdiction. Although FLPMA establishes retention as the general policy, it also provides for disposal of land at fair market value as long as the disposal is generally consistent with BLM's land use plan and is clearly in the national interest. FLPMA clarifies BLM's responsibilities with respect to land sales, exchanges of land, land acquisition, and granting of rights-of-way for a variety of public purposes.

During the past year, BLM's lands program focused on:

- 1) producing regulations to implement the sale, recordable disclaimer, correction of conveyance documents, and exchange provisions of FLPMA;
- 2) modifying existing regulations to eliminate unnecessary requirements and streamline procedures;
- 3) responding to State and local government requests for acquisition or use of public land for community expansion and recreation or public purpose activities;
- 4) "decentralizing" to the maximum extent to allow delegation of decisions to the field level; and
- 5) developing a program of land tenure transactions to foster improved and more efficient management of the public lands.

b) Progress Report

In 1981 the Secretary invited the Governors of the Western States to identify public lands needed for community expansion or other activities. BLM screened the Governors' requests and forwarded those requests for lands not administered by BLM to the appropriate agency. Action plans were developed and implemented for those requests that remained with BLM. Most of the applications received from the Governors were filed under the Recreation and Public Purposes Act. In FY 1983, BLM processed over 300 Recreation and Public Purposes (R&PP) applications involving more than 80,000 acres of land. Applications continue to be filed under the R&PP Act. There currently are 649 applications involving 255,000 acres that have not been processed to completion.

Land exchanges provide opportunities to simplify ownership patterns, meeting both public and private needs. Amendments to the FLPMA regulations, designed to simplify and clarify the exchange process, became final on May 20, 1983. The most significant change provided for equal value rather than fair market value appraisals, as were required in previous regulations. This amendment brought the regulations into greater conformity with Section 206 of FLPMA. It also allows greater flexibility in exchanges, especially in oil shale exchanges where there is insufficient information to permit a fair market value appraisal. Other amendments involved the relationship between planning and exchanges, elimination of certain publication requirements, and deletion of the requirement making exchanges subject to the Uniform Relocation Assistance and Real Properties Acquisition Policies Act of 1970.

During FY 1983, review and evaluation of all lands regulations were continued as part of the Administration's regulatory reform program. A number of changes eliminated unnecessary requirements and streamlined the regulations. Comments on proposed regulations for recordable disclaimers of interest and correction of conveyance documents were analyzed. Final regulations are being developed. Further efforts were made toward regulatory reform for sales and recreation and public purposes disposals.

As Western States were admitted to the Union, they were granted Federal land for a variety of purposes. At the beginning of 1982, eight States (Arizona, California, Colorado, Idaho, Montana, South Dakota, Utah and Wyoming) had a total remaining entitlement of 528,000 acres. During 1982, BLM transferred 80,000 acres, satisfying more than 20 percent of the remaining entitlement. Of the remaining 448,000 acres, 189,180 acres (or 42 percent) were transferred to the eight States during FY 1983, the largest number of acres transferred since 1969. South Dakota's remaining entitlement was satisfied with the transfer of 2,130 acres.

Activity under the Desert Land Act of 1877 continues to be heavy in Nevada and Idaho. There is less activity in other States due to various factors such as the availability of water and suitable lands. As of September 30, 1983, there were approximately 3,000 desert land entry applications on file.

During FY 1983, 10,257 acres of public lands were sold for a total of \$8,172,000. Most of the lands sold consisted of isolated and hard to manage parcels. Sale of these lands also accomplished a number of important objectives, such as providing lands for community expansion.

Reform of the present sale regulations has been ongoing during FY 1983. Final rulemaking governing the sale of public lands should be accomplished during FY 1984. The new regulations are intended to streamline and simplify present processing requirements involving the sale of public lands.

In line with this Administration's objective to improve public service functions within the BLM, the decentralization of decisionmaking authority to the District and Area Offices for almost all lands casework is nearing completion. In the past, processing responsibility on routine lands casework was shared between the State, District, and Area Offices. The shift of decisionmaking authority to the local level has enhanced the public's access and participation in the decisionmaking process, and provides "one-stop shopping" to the public at the District and Area Offices for most land transactions. Other benefits of decentralization include the elimination and streamlining of certain administrative procedures that were not time and cost effective.

c) Issues

Although much has been accomplished, more opportunities exist to streamline procedures for responding to requests for use and acquisition of public land. Key elements of this effort are the ongoing review and revision of outdated regulations and procedures, and the further delegation of decisionmaking authority.

d) Budget and Performance (Lands and Realty)

1) Administrative Responsibility

Program Administrator: Assistant Director, Land Resources

Field Administrators: State Directors

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	27,016	32,553	25,208

FUNDING

	1982 Enacted	1983 Enacted	1984 Proposed
ENERGY RELATED			
Appropriation (\$000s)	5,712	7,316	6,678
NONENERGY RELATED			
Appropriation (\$000s)	21,304	25,237	18,530

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	26,735	32,840	25,208
Work Years	884	982	706

PROGRAM OBLIGATIONS

	1982 Enacted	1983 Enacted	1984 Proposed
ENERGY RELATED			
REALTY			
Dollars (\$000s)	5,633	6,513	6,678
Work Years	206	212	190
NONENERGY RELATED			
REALTY			
Dollars (\$000s)	21,102	26,327	18,530
Work Years	678	770	516

4) Performance

ENERGY RELATED REALTY

Work Units	1982 Actual	1983 Actual	1984 Planned
Environmental Analyses	1,621	947	1,030
Environmental Statements	13	20	20
Field Examinations	5,693	2,986	2,498
Use Authorizations	3,567	2,119	1,729
Compliances	4,448	3,792	2,739

NONENERGY RELATED REALTY

Work Units	1982 Actual	1983 Actual	1984 Planned
Field Examinations	4,384	6,703	5,596
Title Transfers	4,897	8,216	4,846
Use Authorizations	4,552	3,432	2,782
Compliances	2,708	2,488	1,549
Inventory (Acres)	4,743,223	3,191,559	392,805

C.2. RIGHTS-OF-WAY

a) Program Description

The BLM grants rights-of-way for the use of public lands for a variety of private and public purposes, including such uses as roads, trails, pipelines, powerlines, canals, communications sites, and reservoirs.

The primary authorities for granting rights-of-way are FLPMA and the Mineral Leasing Act (MLA). The MLA authorizes rights-of-way for oil, natural

gas, and synthetic fuel facilities while FLPMA, which repealed numerous early right-of-way authorities, is the authority for granting most other rights-of-way except for Interstate and Defense Highways and the Federal aid primary and secondary systems, which are authorized under the provisions of Title 23 of the United States Code.

During the last several years, rights-of-way necessary for energy related exploration and development have had priority in the BLM's program. With the leveling off during FY 1983 of energy activities, BLM has been able to give rights-of-way for nonenergy purposes equal attention.

b) Progress Report

The BLM's emphasis on right-of-way activities during FY 1983 was in internal guidance and training to further implement decentralization of granting authority and regulatory reform actions that were initiated during previous fiscal years. An Interagency Agreement was signed with the Federal Highway Administration to provide a more effective and responsive procedure for making public lands available for highway purposes.

The role of casual use, or use of the public lands for nondisturbing and nondamaging transportation and other purposes, without a documented right-of-way grant was defined to make it broader in applicability and more responsive to resource management needs.

The BLM and Forest Service continued work through the two agencies' respective planning processes in FY 1983 under an Interagency Agreement to identify transportation and utility corridors. When the corridor work is completed, there will be a matrix of preferred right-of-way routes on public and National Forest lands. This matrix will help BLM, Forest Service, right-of-way applicants, and the public better plan for these important uses.

For many reasons, but mostly due to regulatory reform and a better understanding of application processing requirements by BLM personnel and by the applicants, problems directly associated with use of Federal lands for major right-of-way projects decreased dramatically during FY 1983.

In FY 1983 BLM was involved in various stages of the right-of-way granting process for the following array of major projects:

- 6 pipelines
- 2 power plants
- 4 transmission lines
- 3 synfuels projects
- 2 wind generation developments

The BLM experiences continuing activity relative to radar sites, oil and gas field development, water related projects, fertilizer plants, slurry lines, etc.

c) Issues

The protection of cultural resources on private lands crossed by projects requiring a public lands right-of-way continued to be an issue in FY 1983, although a less difficult issue than it had been in the past. As BLM right-of-way applicants/holders, private landowners, State Historic Preservation Officers, and other interested persons gain a better understanding of their respective responsibilities and authorities, the questions and disputes with regard to actions BLM should take or require on private lands concerning cultural resources are decreasing.

In its decision on an appeal of several lawsuits, the United States Court of Appeals for the Tenth Circuit ruled that the FLPMA Cost Recovery regulations were invalid because of problems related to the "reasonableness" factors specified by FLPMA. In response to this decision, BLM is promulgating separate cost recovery regulations for MLA rights-of-way and is developing guidelines that meet the requirements of the court and FLPMA.

Fair market value rental for use of rights-of-way on public lands continues to be an issue on both FLPMA and MLA grants. There are two distinct components of this issue: (1) whether public or quasi-public bodies, which provide a utility or other service similar to utilities or services provided by investor-owned organizations, should pay rent for the use of public lands; and (2) the amount of the annual rental as determined by BLM through use of various appraisal techniques.

d) Budget and Performance Analysis

The Rights-of-Way program is funded as part of the Lands Realty Management activity.

C.3. ACQUISITIONS

a) Program Description

The BLM's acquisition program involves the acquisition of lands or interests in lands (easements) by gift, purchase, or exchange in order to improve the management of public lands. It is mainly directed toward obtaining access over intervening private lands to permit uses such as mineral development, forest and range management, fire protection, and recreation on the public lands. A few small parcels

of land are also acquired for special needs such as seed orchards, nurseries, and office complexes.

The FLPMA, in addition to being BLM's general acquisition authority, authorizes the use of money from the Land and Water Conservation Fund (L&WCF) to acquire lands valuable for outdoor recreation. This funding is separated from appropriations for access acquisitions. The BLM also has authority to acquire lands or easements for intensive management of specific legislated areas such as the King Range, the Pacific Crest Trail, and Wild and Scenic Rivers.

It is BLM's policy to use its acquisition authority sparingly. It is not BLM's policy to add significant new acreage to the public domain, but rather to resolve irregularities in ownership or to acquire legal rights that contribute in some significant manner to management objectives.

In 1971, the Alaska Native Claims Settlement Act (ANCSA) authorized reservation of public easements on lands to be conveyed to Alaska Native corporations. As a result, several thousand easements across Native lands providing access to public lands and resources were reserved to the United States Government throughout Alaska. These easements are periodically reviewed, as required by ANCSA, to determine if the location is as specified in the conveyance and if the easement is being used. If the easement is not being used, rights of access may be terminated.

b) Progress Report

In response to the Public Rangeland Improvement Act of 1978, the BLM continued to acquire a larger number of easements for rangeland improvement than in previous years. These easements enabled the construction of fences, wells, and other water facilities for the betterment of public rangeland conditions.

The BLM expended \$1.6 million for access road easements to support resource programs and provide public access to public lands. A total of \$2.7 million were spent from the L&WCF to acquire fee title or scenic easements on 29 tracts totaling 12,059 acres. Major acquisitions in 1983 included portions of the Rogue National Wild and Scenic River, the King Range National Conservation Area, Yaquina Head Outstanding Natural Area, and the Pacific Crest Trail.

c) Issues

The primary acquisition issue centers on the difficulty of acquiring sufficient numbers of access easements over non-Federal lands to meet man-

agement needs. Without this access, BLM's ability to manage, protect, and develop public lands and resources is restricted, and these lands are not available for use by the general public.

While the checkerboard pattern of the Federal and non-Federal land ownership is the major factor, other developments that contribute to the lack of adequate access are:

- Roads previously open to use by BLM and the public are now being closed as private lands are sold or conflicts develop.
- Local governments are vacating or abandoning public roads due to budgetary constraints and other reasons.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Assistant Director, Land Resources

Field Administrators: District Managers

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Access			
Appropriation (\$000s)	1,733	1,525	1,200
Land Acquisition			
Appropriation (\$000s)	3,712	311	1,391

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Access			
Dollars (\$000s)	1,401	1,646	1,200
Work Years	46	45	31
Land Acquisition			
Dollars (\$000s)	793	2,725	1,735
Work Years	9	7	7

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Title Transfers.....	169	202	142

C.4. WITHDRAWAL REVIEW

a) Program Description

The Withdrawal Review Program, mandated by FLPMA, authorizes the Secretary to review certain public land withdrawals in 11 Western States by 1991. The purpose of the review is to determine whether, and for how long, the existing withdrawals should be continued. BLM completed an inventory of those withdrawn lands in October 1979.

Of some 347 million acres of public lands in the 11 Western States, approximately 57 million acres were segregated from some form of mineral exploration and development and were subject to withdrawal review under FLPMA. Specifically excluded from review were lands set aside for the National Park System, Wildlife Refuge System, Wild and Scenic River System, National Trails System, Indian reservations and other Indian holdings, Wilderness Areas, and the National Forest System. Review of withdrawn lands in Alaska and the Eastern States also is not required under FLPMA.

In addition to acreage closed to mineral exploration and development, some 124 million acres of public land were closed by BLM classification orders to some or all of the nonmineral public land laws. BLM is reviewing all of these classifications and terminating them when appropriate.

b) Progress Report

During FY 1983, other Federal landholding agencies initiated review of their withdrawn lands. BLM completed field review of approximately 20.1 million acres withdrawn by other agencies from all or some of the mineral and nonmineral public land laws. The Secretary approved 94 public land orders opening 7.3 million acres to the public land laws, of which 0.3 million acres were opened to mining and 4.2 million acres to mineral leasing. As part of the review process, BLM also terminated approximately 40.7 million acres of restrictive land classifications, further enhancing multiple use of public lands.

c) Issues

The general public has not voiced an opinion, pro or con, on the review program itself. Certain groups, on occasion, have expressed concern over proposals to open areas receiving heavy public use and/or containing special values to multiple use management including mining and mineral leasing.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Assistant Director, Land Resources

Field Administrators: State Directors

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	4,088	4,079	3,529

3) Program Obligations

	1982 Actual	1983 Actual	1984 Proposed
Dollars (\$000s)	3,798	3,291	3,529
Work Years	112	100	105

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Processing withdrawal applications/revocations.....	176	105	181
Withdrawal review	1,023	369	362
Classification review.....	535	259	72

C.5 ALASKA LANDS

a) Program Description

The Alaska lands program was established to implement the Alaska Statehood Act, ratified on January 3, 1959, and the Alaska Native Claims Settlement Act of December 18, 1971, as amended (ANCSA). The Alaska Statehood Act granted to the State approximately 104.5 million acres. ANCSA granted Alaska Native corporations 44 million acres of land. Conveyance of lands selected under these authorities is BLM Alaska's top priority. However, such conveyances are complicated by a number of factors.

There are approximately 5,500 pending Native allotment cases (10,300 parcels) in Alaska. These require various degrees of field examination, conflict resolution, adjudication, survey, and certification. About 3,600 cases (6,000 parcels) were approved legislatively under Section 905 of the Alaska National Interest Lands Conservation of 1980 (Alaska

Lands Act). These require boundary staking, survey, and issuance of Certificates of Allotment.

In addition to the Native allotments, there are approximately 100 pending Alaska settlement claims and other applications for title transfer of small parcels. Adjudication of these settlement claims and other applications still must be completed. About 190 settlement claims were legislatively approved pursuant to Section 1328 of the Alaska Lands Act. All parcels will require boundary staking, survey, and preparation and approval of the survey plat before the patent can be prepared and issued.

Thousands of applications for Native allotments and hundreds of applications for settlement claims and other small tracts are within lands selected by the Native corporations and the State. These applications must be processed, surveyed, and conveyed before the Native corporations or the State can receive patent to the affected adjacent lands.

Approximately 65,000 mining claim location notices are on file with BLM in Alaska. About 12,000 new claims are filed each year. Tens of thousands of mining claims have been filed on lands selected by the Native corporations and the State. Before these lands can be conveyed to the Native Corporations or the State, determinations must be made as to whether claims are properly filed under FLPMA and if annual affidavits of assessment or notices of intent to hold the claims are filed in a timely manner. Also, all applications for mineral patent must be either processed or declared null and void.

More than 275 Federal withdrawals must be reviewed and possibly processed for conveyance to Alaska Native corporations and the State of Alaska. All Federal withdrawals affecting Native corporation selections must be reviewed to determine lands to be transferred or retained by the Federal agency. Determinations also must be made on conveying State-selected lands.

Surveys are needed on about 12.5 million acres of Native corporation exterior boundaries, 58 million acres of State exterior boundaries, 13,000 Native allotment parcels, 4,500 other small parcels and exclusions, and 200 small villages and numerous reconveyance parcels. Native and State entitlements are based upon surveyed acreages. Therefore, full entitlements cannot be determined or conveyed until all related surveys (including inholdings such as Native allotments) are completed.

Another high priority is the review of nearly 40 million acres of BLM lands in Alaska for possible homesteading, homesites, trade and manufacturing sites and headquarters sites (collectively referred to as the Alaska Settlement laws), mining and mineral leasing. The review does not include lands in the National Petroleum Reserve in Alaska (NPR-A), the

Central Arctic area, or lands selected by the State or Alaska Native corporations. Because FLPMA repealed the Alaska Settlement laws effective October 22, 1986, a 5-year program to review these lands was initiated in June 1981. The land use planning process is used to identify lands that can be opened and the types of use that can be made of them. Views of the State, Alaska Native corporations, and the public help in the identification of specific lands to be opened.

b) Progress Report

As provided by the Alaska National Interest Lands Conservation Act of 1980 (Alaska Lands Act), the State can select lands until January 1, 1994. During FY 1983, BLM conveyed more than 10.0 million acres to the State. This means that as of September 30, 1983, the State has received title to 75.3 million acres, about 72 percent of its entitlement. This includes patent to 22.0 million acres and tentative approval for patent to an additional 53.2 million acres.

During FY 1983, BLM conveyed 7 million acres to Alaska Native corporations. This means that as of September 30, 1983, interim conveyances and patents have been issued for 30.2 million acres of land, or 72.2 percent of their entitlement. This includes patent to 3.4 million acres and interim conveyance of 26.9 million acres.

In FY 1983, BLM continued the opening of lands in Alaska to Alaska Settlement Claims and to mineral leasing. Lands were also opened to non-metalliferous mining.

In September 1982, 10,250 acres were opened to settlement near Slana, Alaska. In November 1983, about 2.6 million acres were opened to FLPMA sales and leases; about 5.7 million acres were opened to mining; and about 4.4 million acres were opened to mineral leasing, all in the Seward Peninsula area of Alaska. The 1982 Public Land Order opening the Minchumina lands also provided for the automatic opening of an additional 9,600 acres to homesites, trade and manufacturing sites and headquarters sites on December 31, 1982. An additional 9,600 acres will be opened on December 31, 1983.

Since 1981, BLM has opened 8.8 million acres to mining, 7.7 million acres to mineral leasing, and 3.0 million acres to settlement or FLPMA sales and leases.

c) Issues

Regulations implementing the policy that the Department of the Interior would not charge the State or Native Corporations for certain submerged lands against their entitlement are due to be published by December 1984.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Assistant Director, Land Resources

Field Administrator: State Director, Alaska

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	--	--	12,183

aAlaska Lands activities were funded under Lands and Realty Management until FY 1984.

3) Program Obligations

	1982 Actual	1983 Actual	1984 Proposed
Dollars (\$000s)	--	--	12,183
Work Years	--	--	284

C.6. WILDERNESS REVIEW

a) Program Description

FLPMA made the preservation and management of wilderness a part of BLM's multiple use mandate for the public lands. Comprehensive inventories of the public lands were required to identify potentially suitable areas for the National Wilderness Preservation System. Public participation occurs throughout the three major phases of the wilderness review process: inventory, study, and recommendation.

Wilderness study areas must be evaluated in detail to determine whether they are suitable for preservation as wilderness or more suitable for nonwilderness uses. Before lands are recommended to Congress as suitable, they must be surveyed for mineral values by the U.S. Geological Survey and the Bureau of Mines. Based on the study, the Secretary of the Interior will submit recommendations on each wilderness study area to the President. The President, in turn, will send his recommendations for wil-

derness to Congress within 2 years of the Secretary's recommendation. Only Congress can designate areas as part of the National Wilderness Preservation System.

In addition to the overall wilderness review, FLPMA required the Secretary to make wilderness recommendations to the President on areas formally identified prior to November 1, 1975, as natural or primitive areas. By the end of FY 1983, one of these recommendations had been made--Aravaipa Canyon Primitive Area (Arizona).

Lands under wilderness review receive special "interim management." FLPMA states that, during the wilderness review, lands must be managed "in a manner so as not to impair the suitability of such areas for preservation as wilderness." The law makes exceptions for valid existing rights and for grandfathered mining, mineral leasing, and grazing uses.

Wilderness review responsibility in Alaska was modified by the Alaska National Interest Lands Conservation Act of 1980, which exempted BLM lands in Alaska from wilderness review except for 4.5 million acres in the Central Arctic Area.

b) Progress Report

The wilderness inventory in the Western States (excluding Alaska) was completed in November 1980. Of the 174 million acres inventoried, 150 million acres lacked wilderness characteristics and were released from further wilderness review. Some 24 million acres in some 780 separate tracts have been identified as wilderness study areas. A list of the wilderness study areas was published in the *Federal Register* on July 8, 1982, and will be updated in FY 1984.

The review of areas previously listed as natural and primitive areas is nearing completion. On September 13, 1982, the President recommended to Congress that it designate Aravaipa Canyon Primitive Area, in Arizona, as wilderness.

Of the other 52 natural and primitive areas involved, recommendations on 35 are under review within the Department. The remaining instant study areas are being reviewed along with the studies for contiguous lands within BLM's normal wilderness study process.

Management of any BLM administered lands designated by Congress as wilderness will be guided by the Wilderness Management Policy, published in the *Federal Register* on September 24, 1981. BLM's wilderness studies will be guided by the Wilderness Study Policy, published in the *Federal Register* on February 3, 1982. The document contains

planning criteria for recommendations on the suitability or nonsuitability of wilderness study areas for wilderness designation. These studies are now underway. Thirty-five wilderness study efforts were completed in FY 1983. By the end of FY 1986, a total of 100 wilderness study efforts will have been completed, covering all BLM wilderness study areas.

During the review, wilderness study areas are managed under the Interim Management Policy and Guidelines for Lands Under Wilderness Review (IMP), issued on December 12, 1979. Mineral leases issued prior to FLPMA were recognized as valid existing rights through a modification of the IMP on October 5, 1981. While protecting wilderness values to the maximum extent possible, other multiple uses such as grazing and permit exploration and development of energy and mineral potential are permissible under law. The Department's objective is to permit exploration and development activities, especially energy and mineral exploration, to the maximum extent permissible under the law, while protecting wilderness values as much as possible.

The Secretary directed on December 30, 1982, that no leases be issued in BLM wilderness areas or wilderness study areas. The principal exception is in cases where drilling can be done without surface occupancy, and then only if the area is adjacent to producing oil and gas fields or areas prospectively valuable for oil and gas. This exception was prescribed by Congress in the FY 1983 appropriations act.

Approximately 1.5 million acres were deleted from wilderness study area status in FY 1983 to bring the wilderness review into compliance with FLPMA. The lands affected fell into three categories: (1) wilderness study areas smaller than 5,000 acres, (2) "split estate" lands where subsurface mineral rights are not federally owned, and (3) wilderness study areas having wilderness characteristics only when considered in association with contiguous Federal lands administered by another agency. The Interior Board of Land Appeals (IBLA) had ruled that such lands had been improperly identified for wilderness study under Section 603 of FLPMA, and after reviewing the Board's decisions, the Solicitor concluded IBLA was legally correct.

S. 96, a bill to designate 260,000 acres in southwestern Montana as the Lee Metcalf Wilderness Area, was introduced in Congress in 1982. On October 31, 1983, the bill was enacted as Public Law 98-140. The 6,000-acre Bear Trap Canyon included within the legislation became the first wilderness area to be managed by BLM. The remaining 254,000 acres are managed by the Forest Service.

c) Issues

Some wilderness inventory results have been challenged by the public through formal appeals filed with the IBLA. The appeals reflect both pro- and anti-wilderness study viewpoints. In FY 1983, IBLA issued decisions on all remaining appeals except five cases.

The scheduling of wilderness studies is also a public concern because lands remain under interim management constraints that prohibit a variety of multiple uses during the study period. In response to this concern, BLM is attempting to complete studies as rapidly as possible. The majority of areas will have been studied by the end of FY 1985, well ahead of the 1991 deadline set by FLPMA. Rapid completion of the studies will enable "nonsuitable" lands to be released expeditiously from interim management constraints.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Assistant Director, Land Resources

Field Administrators: State Directors

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	13,970	12,179	7,239

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	13,501	11,918	7,239
Work Years	198	180	190

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Inventory (million acres)	4.5	.5	.3
EIS's (final wilderness)	30	35	20
Study (million acres)	2	5	5
Bureau of Mines/U.S. Geological Survey mineral reports	0	5	16

C.7. RECREATION MANAGEMENT

a) Program Description

The primary objective of BLM's recreation program is to facilitate the use of dispersed and resource dependent recreation (such as off-highway vehicle use, river rafting, hiking, camping, and fishing) by providing (1) information on available recreation resources; (2) input to Bureau planning efforts where recreation issues exist; and (3) visitor assistance, use supervision, and Recreation Area Management Planning in more intensively used areas.

Nearly all of the public lands managed by BLM are open to recreational use. Areas with specially recognized recreational values include:

- 108 recreational rivers with more than 4,000 miles suitable for floatboating or whitewater use. Thirteen rivers—the Rio Grande, North Fork American, Upper Missouri, Rogue, Beaver, Birch Creek, Delta, Fortymile, Gulkana, Unalakleet, Eel, Trinity, and Klamath—are designated as National Wild and Scenic Rivers. Twenty-two more rivers are currently being considered for inclusion in the system.
- 19 designated components of the National Trail System with nearly 2,000 miles under BLM management; and
- Three National Conservation Areas—Steese, Alaska; California Desert and King Range, California; and one National Recreation Area—White Mountains, Alaska.

A major recreational activity on the public lands is the use of off-road vehicles (ORV's) such as motorcycles, minibikes, trail bikes, snowmobiles, dune buggies, and all terrain vehicles. The widespread use of such vehicles began in the late 1960's and increases significantly each year. BLM recognizes ORV use as a legitimate recreational activity; however, because of conflicts with other recreation activities and resource uses (range, wildlife, cultural, etc.), BLM often designates public lands as open, closed, or limited to ORV use.

b) Progress Report

Major program accomplishments in FY 1983 include the following:

- A policy to focus expenditures of funds on the highest priority recreation areas was implemented.
- Use supervision was provided in as many as 90 special recreation areas, including California Desert Conservation Area, King Range Conser-

vation Area, Lower Colorado River, Red Rocks Canyon Recreation Lands; and many of the popular floatboating rivers in the West were managed intensively. Estimated visits are approximately 55 million.

- More than 4,000 special recreation permits were issued with an estimated commercial value of \$75 million.
- A fee policy and regulations underwent final review and revision in FY 1983. Fee increases were begun using existing regulations.
- A management plan for long-term visitor management in the California Desert and Lower Colorado River was developed in California and Arizona.
- Six draft "wild and scenic river" studies were completed in Alaska and are undergoing public review. The BLM also contributed to a study of the Denali Scenic Highway in Alaska.
- 43 CFR Part 8360 was revised to provide rules of conduct for recreation management.
- A "Volunteer Guide Book" was published and distributed to field offices to facilitate the recruitment and use of volunteers in recreation management.
- New policy direction for the Visual Resource Management function in the BLM that focuses Bureau efforts on improving the visual aspects of project design and reduces the emphasis on inventory and visual assessment was developed and implemented.

c) Issues

BLM is giving priority to special recreation areas with National significance. In conjunction with this effort BLM is examining the development of procedures and incentives to place funding and management responsibilities for areas of greater significance locally than nationally with States and/or the primary beneficiaries of those recreation opportunities.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Assistant Director, Land Resources

Field Administrators: State Directors

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	5,688	6,489	6,516

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	5,620	6,470	6,516
Work Years	167	175	170

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Visitor Assistance (work years expended)	20	44.5	57.2
Recreation Area Management Plans	42	21	28
Special Recreation Permits Issued	5,340	4,700	4,000

C.8 NATURAL HISTORY RESOURCE MANAGEMENT

a) Program Description

FLPMA requires that BLM provide for scientific use of appropriate natural resources as an integral part of multiple use management. FLPMA also requires BLM to protect the quality of ecological and other scientific resources, and to preserve certain public lands in their natural condition. Similar provisions are contained in the Alaska National Interest Lands Conservation Act, the Oregon and California Grant Lands Act, the Land and Water Conservation Fund Act, the Taylor Grazing Act, and the National Environmental Policy Act.

BLM is required to consider scientific resource values in formulating, approving and implementing resource development and management plans. In addition, the Natural History Resource Management (NHRM) Program is being developed to enhance BLM's contributions to programs such as the Federal Research Natural Area Program, State Natural Heritage Programs, and the National Natural Landmarks Program.

Through the NHRM Program, BLM identifies natural areas on public lands having significant scientific and educational values; develops and implements site specific measures to protect these areas (while

allowing all compatible uses), and facilitates use of these areas by researchers, educators, and others in environmental science fields. BLM coordinates its efforts with other Federal agencies, state and local governments, and private institutions to identify the types of natural areas needed in a balanced national system.

In 1951, BLM first contributed to the national system of designated Research Natural Areas (RNA's) to maintain natural diversity and facilitate observational scientific research. In total, 47 RNA's have been designated on 124,000 acres of public lands. Reviews are underway on 45 additional sites.

BLM also participates in the National Park Service's National Natural Landmarks (NNL) Program, established by the Secretary in 1963. The purpose of the program is to identify and encourage protection of scientifically selected areas throughout the United States that are nationally significant representatives of the country's natural heritage, without discrimination as to ownership or administrative jurisdictions. Of the 548 National Natural Landmarks designated by the Secretary, 43 occur wholly or in part on BLM-administered public lands.

b) Progress Report

Program accomplishments during FY 1983 include:

- 71 existing and potential Research Natural Areas and National Natural Landmarks were protected from unauthorized uses.
- 19 sites totaling 26,122 acres in Colorado, Oregon, Washington, and Wyoming were established as Research Natural Areas, and 33 additional sites were evaluated to determine their suitability for RNA establishment.
- Eureka Dunes ACEC, 4,200 acres in the California Desert, was designated by the Secretary as a National Natural Landmark.
- BLM's 3,360-acre Northern California Coast Range Preserve RNA/ACEC was designated by the United Nations Educational, Scientific, and Cultural Organization's Man and the Biosphere Program's International Bureau as part of the California Coast Ranges Biosphere Reserve. This designation unites eight owners under common goals for five separate areas that contain the scientifically most valuable examples of ecological diversity in the Oregon Coast Range.
- Formal agreements were signed with the Executive Director of Colorado's Department of Natural Resources, thereby designating two BLM RNA's as Scientific Natural Areas under the State's Natural Areas Act.

●The California State Director signed a Memorandum of Understanding (MOU) with the Forest Service, National Park Service, and U.S. Fish and Wildlife Service; the State Departments of Fish and Game and Parks and Recreation; and The Nature Conservancy. The MOU established executive and staff coordinating committees and general procedures for interagency cooperation in the identification, selection, and management of significant natural areas throughout the State. It is the first formal agreement joining both the major Federal and State agencies with a private conservation organization in the operation of a natural areas program, especially one established by State law or based on a State Natural Heritage Inventory Program.

●The Colorado State Office and Colorado Department of Natural Resources signed a cooperative agreement establishing a Geologic Advisory Group of 27 academic, private, and governmental geologists and paleontologists from across the State. The new group will contribute information and advice for joint BLM-State efforts to record locations, natural conditions, and management status of geologic element occurrences on public lands. It will also provide evaluations and management recommendations for the top priority geologic occurrences identified as potential BLM/State Research Natural Areas.

●A Recreation and Public Purposes Act patent for 280 acres of public land near Boise, Idaho, was issued to the Peregrine Fund for the establishment of a world center for research, education, breeding, and reintroduction of raptors. The location will allow the Fund to work with Boise State University and to use the nearby Snake River Birds of Prey Research Natural Area.

d) Budget and Performance Analysis (Natural History and Cultural Resources)

1) Administrative Responsibility

Program Administrator: Assistant Director, Land Resources

Field Administrators: State Directors

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	5,688	4,566	4,605

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	5,620	4,467	4,605
Work Years	167	120	120

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Site Protection (#).....	53	71	67
Site Evaluation (#).....	31	33	35
Site Designation (#).....	6	19	10

C.9. CULTURAL RESOURCE MANAGEMENT

a) Program Description

The National Historic Preservation Act, supported by the Federal Land Policy and Management Act, gives BLM its primary direction for managing the Federal Government's largest cultural resource base. In a partial inventory, BLM has recorded approximately 100,000 archaeological and historic properties and estimates that a full inventory would show five million properties on BLM-administered lands.

The inventory sample shows a highly varied physical record of some 20,000 years of human history. Representations of this long past include: the scarcely noticeable scatters and deposits of prehistoric stone tools marking temporary work sites of the hemisphere's earliest human occupants; twelfth-century A.D. masonry pueblos and cliff dwellings of the Southwest; still visible ruts of early-settlers' wagon trails; abandoned military posts; mysterious aboriginal rock art; mining ghost towns with Victorian-era architecture; failed homesteads; and many others.

In its cultural resource management program, BLM identifies, records, evaluates, plans for, and makes informed judgment as to the use of the cultural resources under its jurisdiction. Those that should be conserved against human-caused or natural deterioration are protected. The program's original role was to ensure compliance with the National Historic Preservation Act, the National Environmental Policy Act, and Executive Order 11593. Compliance with these requirements continues to be a major workload feature, however, the focus of the program under FLPMA has shifted toward full management of cultural resources.

b) Progress Report

Program accomplishments through FY 1983 include the following:

- More than 290 BLM cultural properties are now on the National Register of Historic Places. Approximately 400 additional properties have been nominated or determined eligible for inclusion. Also, an estimated 15,000 properties have been evaluated as possibly suitable for nomination, a number that is increasing at a rate of over 1,000 properties per year.
- Inventories of existing cultural resource data have been compiled for about 75 per cent of BLM-administered lands. In addition, low percentage sample inventories were completed on about 5 million acres in FY 1983.
- New emphasis was placed on using sample inventory results together with other known data to concentrate intensive inventory where it is most likely to reveal significant cultural properties. Predictive modeling of this kind was the subject of several memoranda of agreement with the Advisory Council on Historic Preservation. Modeling reduces inventory time and costs and eliminates unneeded inventory without creating undue risks to significant cultural properties.
- Approximately 14,000 cultural properties have been evaluated and classified according to one or more BLM categories of use: socio-cultural use, current or potential scientific use, management use, and conservation for future use. These classifications give field managers a sound basis for considering the importance of the properties when making multiple use decisions.
- Nearly 25,000 fragile and threatened cultural properties were protected by one or more means, including patrolling, posting signs, erecting fences, and site stabilization; periodic patrol was carried out over nearly 2.5 million acres of public lands.
- Draft cultural resource program regulations, including BLM procedures for complying with the National Historic Preservation Act, have been prepared. When released, these regulations will integrate governmentwide requirements into BLM management systems.
- Procedures for meeting the permit provisions of the Archaeological Resources Protection Act were prepared, and will be issued when uniform regulations for the Act are published.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Assistant Director, Land Resources

Field Administrators: State Directors

2) Funding and Program Obligations

The Cultural Resource Program is funded together with the Natural History Program

3) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Inventory (million acres)	.9	.5	.5
Major Protection/Stabilization (# projects)	41	42	48
Permits (#)	384	298	350

D. Renewable Resources



D. RENEWABLE RESOURCES

D.1. LIVESTOCK GRAZING MANAGEMENT

a) Program Description

The Bureau of Land Management administers grazing by livestock on 170 million acres of public rangelands in 11 Western States (exclusive of Alaska). Rangelands are lands on which the native vegetation is predominantly grasses, grasslike plants, forbs, or shrubs. Grazing permits are issued for up to ten years and authorize the annual grazing use by approximately 22,000 livestock operators.

BLM's rangeland management program is guided by the Taylor Grazing Act (TGA) of 1934, FLPMA, and the Public Rangelands Improvement Act (PRIA) of 1978. These acts outline the following broad goals for rangeland management and improvement:

- To administer livestock grazing on public rangelands to balance use and sustain resource productivity;
- To protect and improve the rangeland resources through sound land use planning, which includes making cost effective investment and management decisions;
- To make decisions in consultation, cooperation, and coordination with the lessees/permittees involved, the affected landowners, interest groups, individuals, and other agencies; and
- To make sure that improvements in rangelands provide multiple-use benefits.

The Bureau conducts soil and vegetation inventories at varying intensities to aid the land use planning process and to provide a baseline for monitoring. Monitoring studies are conducted to determine if rangeland management goals are being met and to determine the need for and extent of changes from current management practices.

b) Progress Report

The rangeland management program is influenced by the judgment of the U.S. District Court in the case of the *Natural Resources Defense Council, Inc., et al. v. Rogers C. B. Morton, et al.* The 1975 court order, as amended in 1978, requires BLM to prepare 144 site specific grazing Environmental Impact Statements (EIS's) by 1988. BLM is essentially on schedule in meeting this order; 84 EIS's had been filed by September 30, 1983. These EIS's addressed livestock grazing on 106 million acres of public lands in 10 States; an additional 22 EIS's,

covering 27 million acres, will be completed in FY 1984.

A major objective of the past year has been to identify additional ways to reduce the cost of preparing the required EIS's, while still meeting the intent of the National Environmental Policy Act and the amended court order. Implementation of policy changes developed during FY 1982 has helped to reduce the average cost of preparing an EIS from \$391,000 in FY 1978 to less than \$127,000 in FY 1983.

The BLM, together with the Forest Service, has continued to conduct the Experimental Stewardship Program (ESP) authorized by PRIA. The purpose of the ESP is to explore ways to improve the public rangelands by providing incentives for, or rewards to, livestock operators whose grazing management results in improved resource conditions. The primary emphasis of the ESP continues to be improving rangelands through increased cooperation among all rangeland users involved.

Allowing individual operators to deduct half of the money they invest in rangeland improvements from their grazing fees is an incentive now being tried in the three ESP projects the BLM jointly administers with the Forest Service in Challis, in central Idaho; Modoc/Washoe, in northeastern California and northwestern Nevada; and East Pioneer, in southwestern Montana. The BLM also is continuing to evaluate various incentives through two projects with groups of livestock operators and other rangeland users, and with individual livestock operators. The two group projects are the Tonopah ESP in central Nevada and the Randolph ESP in northern Utah. The 16 experimental projects with individual operators are ongoing in several States.

Based on the early results of the ESP and similar cooperative management efforts with State wildlife agencies and volunteer groups, the BLM has initiated a Cooperative Management Agreement (CMA) program. The BLM will enter into CMA's with livestock operators, wildlife and recreation organizations, and other user groups for shared management of a specific activity on a specific area of public land. The primary purpose of the CMA program is to involve public land users in on-the-ground management to: (1) increase public involvement in public land management, (2) provide the public with facilities and levels of use not possible under BLM capabilities alone, and (3) provide recognition to individuals and groups contributing to public land management. The terms and conditions of a CMA will require all cooperating groups to adhere strictly to the multiple use and sustained yield objectives identified through BLM's land use

planning process. A CMA will not give a cooperator the authority to limit or exclude other public land users, nor does it exempt a cooperator from laws and regulations affecting public land management.

The BLM and the Forest Service are proceeding with their joint review of the current grazing fee formula, as required by PRIA. That act established the current formula for a 7-year trial period (1979-1985) and requires the Secretaries of the Interior and Agriculture to submit a report to Congress by December 31, 1985. The report is to include an evaluation of the grazing fee formula set by Congress, an evaluation of other fee options, and the Secretaries' recommendations for a grazing fee system for 1986 and subsequent years. The BLM and FS are completing the field work in a joint appraisal of the fair market grazing rental value of public grazing lands in the 16 Western States. Fair market value for public grazing lands was last established in 1966, following a survey of 10,000 ranchers. Approximately 50,000 private grazing leases containing 100 million acres were surveyed during the current appraisal. In June 1983, Colorado State University completed a contracted study of grazing fee systems used by state and local governments and other Federal agencies in the Western States. The researchers identified over 100 agencies that lease grazing lands, and their report assesses the different leasing arrangements, the rationale for the leases, and the distribution of grazing fee receipts.

c) Issues

Some wildlife and environmental interest groups are opposed to cooperative management agreements (CMA's) with livestock operators on the grounds that BLM would be turning over too much management authority to the operators. This issue, however, is more a matter of perception than substance. The BLM recognizes that operators have an economic interest in grazing use and, consequently, have incorporated numerous environmental safeguards into the CMA program. Although a CMA will allow an operator to adjust the season and amount of grazing use, these adjustments must be within parameters set by BLM. In addition, the operator's grazing management practices must help achieve the multiple use and sustained yield objectives set for the allotment through the land use planning system. Failure to meet these objectives may result in modification or termination of the CMA. Only operators who are nominated and approved by their peers as outstanding grazing managers, and who are operating on allotments where no user conflicts exist, will be eligible for CMA's.

Grazing fees collected for public land use remain an issue. The fee is calculated annually, using a

formula provided in PRIA. In FY 1983 the fee was \$1.40 per Animal Unit Month (AUM), down from \$1.86 in 1982. This 1983 fee of \$1.40 contrasts with the average private grazing land lease rate of \$8.85 per AUM for the same period. The two rates are not directly comparable, however, and one reason for the 7-year trial period for the current grazing fee formula is to allow time for the Secretaries of the Interior and Agriculture to refine their data on the value of public land grazing.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Assistant Director, Renewable Resources

Field Administrators: State Directors, District Managers

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	36,138	34,754	31,360

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	34,822	34,614	31,360
Work Years	997	957	830

4) Performance

	1982 Actual	1983 Actual	1984 Planned
Grazing EIS's Completed (#)	21	17	22
Millions of Acres Inventoried.....	23.5	9.8	3.7
AMP's Implemented (#)	220	161	197
Allotments Supervised (#)	3,546	9,138	10,400
Grazing Permits Issued (#) ...	26,418	27,100	26,300
Allotments Monitored (#)	5,106	5,044	4,800

D.2. RANGE IMPROVEMENT

a) Program Description

The Bureau's rangeland improvement program is authorized by the Taylor Grazing Act (TGA) of

1934, the Federal Land Policy and Management Act (FLPMA) of 1976, and the Public Rangelands Improvement Act (PRIA) of 1978. These three Acts establish and reaffirm a national commitment to improve the condition of the public lands, with resulting benefits to wildlife, watershed, and livestock. Range improvement activities include, but are not limited to, seeding, fence construction, weed control, water development, enhancement of fish and wildlife habitat, and maintenance of existing improvements. Decisions on the types of improvements needed are reached through the land use planning/EIS process.

Congress annually appropriates funds from two sources to support the Bureau's rangeland improvement program. The range betterment fund consists of 50 percent of all public land grazing fees collected, or \$10 million a year, whichever is greater. These funds are appropriated under the authority of the TGA, as amended by FLPMA, specifically for rangeland improvement work. Grazing administration funds consist of funds appropriated by Congress under FLPMA and PRIA, which also may be allocated to range improvement. The Bureau currently directs range betterment funds toward implementation of new on-the-ground improvements, while grazing administration funds are used for administration of the range improvement program, preparation of environmental and resource clearances, and other actions needed or required by law to support new improvements. Most maintenance for which BLM is responsible is funded from grazing administration funds.

b) Progress Report

The Bureau gradually is transferring responsibility for maintaining structural rangeland improvements to individuals directly benefiting from the improvements. When the transfer is completed during 1984, funds now being spent for maintenance will be available for new improvements.

To increase the amount of funds available for improvement work, the Bureau is encouraging private contributions toward rangeland improvements on public lands. Final policy directives issued during FY 1983 provide incentives for private contributions, including assigning a high priority to implementation of improvements funded with private contributions.

New economic analysis procedures for making decisions about investments in rangeland improvements were implemented by BLM during FY 1983. These procedures, which consist of three gradually tighter economic screens, will help determine which grazing allotments can produce the greatest return on dollars invested and where the dollars should be

invested first. Investments that cannot be justified strictly on economic terms must demonstrate overriding resource or social concerns. District Grazing Advisory Boards will have an active role in the decisionmaking.

c) Issues

No current issues exist.

d) Budget and Performance Analysis (Range Improvement)

1) Administrative Responsibility

Program Administrator: Assistant Director, Renewable Resources

Field Administrators: State Directors, District Managers

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	13,226	11,200	10,000

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	10,224	12,058	10,000
Work Years	153	148	130

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Projects Developed			
Water Facilities	872	683	856
Miles of Fence	509	605	633
Management Facilities	169	112	132
Projects Surveyed & Designed	2,888	1,263	1,271
Projects Maintained			
Water Facilities	1,698	1,296	1,300
Miles of Fence	433	230	300
Management Facilities	115	143	100

D.3. SOIL, WATER, AND AIR MANAGEMENT

a) Program Description

Protection and management of the soil, water, and air resources of the public lands are basic responsibilities of BLM and are central to both the short- and long-term objectives of BLM programs. Increased environmental awareness and concern for these resources resulted in several new laws and executive orders in the last decade, among them the Federal Water Pollution Control Act Amendments, Safe Drinking Water Act, Clean Water Act, Colorado River Salinity Control Act, Clean Air Act, and the National Environmental Policy Act.

The program conducts soil and water inventories and supports studies and research of water quality and quantity, air quality, erosion, and watershed practices to improve the effectiveness of BLM's management of the soil, water, and air resources associated with public lands. Soil and water inventory data provide much of the resource information needed for multiple-use planning and preparation of environmental impact statements and assessments. Soil surveys help determine soil-vegetative relationships, which are used to develop guidelines for rangeland management. Soil surveys also provide the basic data for range resource inventories. These data also contribute to successful operation of other BLM programs, such as energy development or recreation. BLM monitors climate, meteorology, and air quality to support multiple-use planning, prescribed burning, rangeland management, energy and mineral leasing, and other resource programs.

b) Progress Report

In the past fiscal year, 9.1 million acres of soils were inventoried, bringing the total number of acres inventoried to 119.8 million acres. Only 44.6 million acres, or 27 percent of the total planned, remain to be inventoried.

Almost 50 percent of the total workload necessary to identify and quantify water use is now complete. The Bureau will share this information with States to help them identify what water sources on public lands are available for appropriation under State water law.

The BLM's air resource program supports the National Acid Precipitation Assessment Program by operating acid rain monitoring stations at remote locations in nine Western States. These stations are providing data essential for the development of national acid precipitation maps to determine the

trends and possible impacts of acid deposition in the western United States.

c) Issues

No current issues exist.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Assistant Director, Renewable Resources

Field Administrators: District Managers

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	17,042	16,946	16,595

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	16,648	16,488	16,595
Work Years	322	318	310

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Millions of acres inventoried.....	35.1	15.9	14.7
Studies conducted	569	243	155
Water sources inventoried	1,692	2,198	8,283

D.4. FOREST MANAGEMENT

a) Program Description

Approximately 90 million acres of the land under BLM's jurisdiction is forest land. Most of this (64 million acres) is in Alaska where timber development has been deferred until State selection, native claims, withdrawals, and other dispositions are completed. Of the remaining 26 million acres of forest land outside of Alaska, 5 million acres are capable of producing high quality commercial timber in quantities sufficient to warrant intensive management.

The remaining 21 million acres, called "woodlands," are covered with open-grown stands of widely scattered trees. Historically, these lands have not been considered valuable as a commercial wood source, although they do produce posts, poles, Christmas trees, and fuelwood. Woodlands often are managed less intensively than commercial timber lands, but for a variety of values including wood products, livestock forage, wildlife habitat, recreational uses, watershed protection, and minerals.

By far the most commercially valuable of the timber lands managed by BLM are the 2.4 million acres in western Oregon known as the "Oregon and California (O&C) railroad grant lands" and the "Coos Bay Wagon Road (CBWR) grant lands." They were granted originally to private ownership in the 1800's for railroad and wagon road development but were returned to the Federal Government when the developers failed to meet the terms of their land grants. Among the most productive forests in the country, these lands produce about 91 percent of the total board feet annually harvested from BLM forests. The timber produced on BLM lands outside of western Oregon is important to many small western communities.

b) Progress Report

In March 1983 Director Burford signed a new policy statement for managing the forest resources in the O&C forest of western Oregon. Following this guidance, new 10-year timber management plan decision documents were issued for the O&C lands in western Oregon. A new full allowable cut level of 1.185 billion board feet has been established.

BLM continued its program to offer sales of logging residue and small salvage sales. Over 3,280 tracts totaling over 40 million board feet were offered for sale in FY 1983.

Because of the depressed lumber market and unusually high bidding on timber sales from 1979 through 1981, the Secretary declared that timber sale contracts executed prior to October 1, 1982, will not expire until July 1, 1984. Approximately 2.4 billion board feet of timber sold at a price of nearly \$740 million are affected.

OPurchasers of the affected timber obtained partial relief when President Reagan signed a memorandum on July 27, 1983, authorizing the Secretaries of the Interior and Agriculture to extend certain timber sale contracts for a period up to 5 years beyond their current termination dates.

BLM timber sales affected by this Order will be

staggered in such a manner as to spread the default dates over a 5-year period. As a condition of participation, the purchasers had to agree by November 30, 1983, to certain terms and conditions set forth in an extension agreement between BLM and the purchasers.

c) Issues

Proposals to set aside timberlands for purposes that do not allow logging and consequently reduce the timber harvest continue to be a major issue. BLM expects this issue to be raised over and over as land use plans are developed.

The use of chemical herbicides as a management tool continues to be an issue, especially in western Oregon where appeals and legal actions are affecting implementation of vegetation management programs.

Demand has increased dramatically for fuelwood from all forest lands, both for personal and commercial use. In many areas, improved inventories and economic, social, technological, and environmental studies are needed before program expansion can be administered effectively.

d) Budget and Performance Analysis: Forest Management (O&C)

1) Administrative Responsibility

Program Administrator: Assistant Director, Renewable Resources

Field Administrators: Oregon State Director, District Managers, Salem, Eugene, Coos Bay, Roseburg, and Medford, Oregon

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	37,245	37,741	40,351

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	31,689	36,849	40,351
Work Years	853	912	752

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Timber Sold (MBF)	1,093,345	1,106,000	1,061,000
Acres Reforested	20,052	15,730	19,000
Land Treatment (acres)	43,445	29,346	53,000
Site Preparation (acres).....	23,227	13,876	21,000
Protection (acres)	10,690	8,500	7,000
Release (acres)	9,528	6,970	25,000

e) Budget and Performance Analysis: Forest Management (Management of Lands and Resources)

1) Administrative Responsibility

Program Administrator: Assistant Director, Renewable Resources

Field Administrators: State Directors, District Managers

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	8,263	5,706	6,112

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	8,138	5,701	6,112
Work Years	232	140	145

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Timber Sold (MBF)	100,800	93,019	92,000
Acres Reforested	1,676	936	1,135
Land Treatment (acres)	1,210	3,055	2,382
Site Preparation (acres).....	666	970	1,882
Protection (acres)	502	1,910	360
Release (acres)	42	175	140
Precommercial thinning (acres)	532	547	493

D.5. WILDLIFE HABITAT MANAGEMENT

a) Program Description

The Bureau of Land Management manages extensive and diverse habitat for hundreds of wildlife

species. These resources are prized for their recreational, scientific, educational, social, economic, cultural, subsistence, and esthetic values. Some 80 federally listed threatened and endangered plant and animal species have been identified on the public lands. Endangered species legislation, passed in 1979 and amended in 1982, added a new dimension to management of the Nation's wildlife by providing a means for conserving and managing ecosystems essential to plants and animals in danger of extinction.

Working with State wildlife agencies, BLM carries out its mission of managing fish and wildlife habitats on the public lands by ensuring that wildlife needs are considered in all land-use planning and decisionmaking. BLM has executed memoranda of understanding and numerous cooperative agreements with 14 Western States and 7 States in the East. To summarize these arrangements, the States are responsible for wildlife population management, while BLM is responsible for managing the habitat on public lands. By protecting and improving habitat on public lands, BLM helps compensate for population losses caused by declining habitat. The interdependence of habitat and population management makes the close coordination between BLM and the States a critical element in BLM's wildlife management program.

The FLPMA recognized wildlife as one of the principal uses of the public lands. It further increased BLM's authority, as well as its responsibility, to manage, protect, and enhance wildlife resources. Since the passage of FLPMA in 1976, BLM has increased its efforts to inventory, plan for, and implement on-the-ground management and use of terrestrial and aquatic wildlife habitat.

b) Progress Report

Special attention in FY 1983 was focused on several key wildlife management activities, among them are:

● *Inventory and Planning* Continued with streamlined inventory and data analysis techniques for threatened/endangered and other wildlife species and focused data collection on those BLM lands where critical issues or potential conflicts are the greatest. Inventory efforts have been shifted from extensive to intensive.

● *Monitoring* Continued with coordinated renewable resource monitoring programs for evaluating the effectiveness of management actions. The monitoring process focused on areas where: (1) management decisions are being implemented, or (2) information is needed to resolve significant resource management issues or

conflicts. Monitoring is aimed at resolving significant issues with other activities such as energy development, grazing, and rights-of-way.

- **Endangered Species Act (ESA)** Worked with the U.S. Fish and Wildlife Service to streamline the ESA Section 7 consultation process to ensure timely threatened/endangered species clearance on energy related projects. Initiated directives to implement amendments to the ESA.
- **Habitat Improvement** Continued cooperation with State wildlife agencies to ensure conservation and rehabilitation of wildlife habitat under the Sikes Act and FLPMA authority.
- **Endangered Species Recovery** Cooperated with State and Federal wildlife agencies in the implementation of recovery plans by providing habitat for the release of captive-reared peregrine falcons. Continued work with USFWS and State of Wyoming in implementing studies to determine effects of oil and gas development on the endangered black-footed ferret. Also assisted in developing new inventory techniques.

c) Issues

The wildlife program needs to further concentrate and streamline its coordination with other Bureau programs. This will ensure that managers have the most complete and comprehensive wildlife information when making multiple-use resource decisions.

d) Budget and Performance Analysis .

1) Administrative Responsibility

Program Administrator: Assistant Director, Renewable Resources

Field Administrators: District Managers

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	14,918	15,150	13,515

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	14,688	15,014	13,515
Work Years	382	351	295

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Millions of acres inventoried.....	27.2	55.2	10.4
Miles of Stream inventoried..	8,150	400	1,045
New HMPs prepared and revised	124	165	50
Thousands of acres of wildlife habitat improved	1,506	1,200	6,249
Miles of stream habitat improved.....	2,996	2,800	744
Millions of acres of wildlife habitat maintained.....	0.9	1.0	9.5
Miles of stream habitat maintained	3,398	3,300	700
Millions of acres monitored...	1.8	3.6	18.2
Miles of stream habitat monitored	1,800	1,000	1,690

D.6. WILD HORSE AND BURRO MANAGEMENT

a) Program Description

The protection, management, and control of wild horses and burros on public lands administered by BLM were entrusted to the Secretary of the Interior¹ by the Wild Free-Roaming Horse and Burro Act of 1971. The Act has been amended by provisions contained in the Federal Land Policy and Management Act of 1976 and the Public Rangelands Improvement Act of 1978. The amendments significantly improved and strengthened BLM's management capabilities.

The 1976 amendment allowed the use of helicopters and motorized vehicles for removing excess animals. Prior to that, capture operations were slow, dangerous, and costly. The 1978 amendments were much broader in scope and focused on improving management through research and consultation; establishing priorities for removal and disposal of excess animals; and strengthening the adoption process. For the first time, adopters of excess animals were given the opportunity to acquire ownership of the animals through transfer of title by the government.

Based on the legislative mandates, BLM's wild horse and burro program objectives are:

- 1) To preserve wild free-roaming horses and burros on public lands as symbols of our heritage and to enhance the diversity of life forms;

¹ The Forest Service through the Secretary of Agriculture shares in the responsibility. However, 95 percent of the animals are on BLM-administered lands.

2) To protect wild free-roaming horses and burros from illegal capture, branding, harassment, or death;

3) To manage wild free-roaming horses and burros as components of the public lands in a manner that maintains or improves the rangeland ecosystem; and

4) To provide humane care and proper treatment of captured wild horses and burros.

b) Progress Report

Fiscal Year 1983 was a year of change in BLM's wild horse and burro program, as revisions were sought to improve the effectiveness and cost efficiency of the program. Primary emphasis was placed on the adoption program as severe weather, declining economic conditions, and increased adoption fees sharply reduced the number of excess animals placed in private maintenance during the first half of the fiscal year.

A moratorium on destruction of healthy excess wild horses and burros established in January 1982 continued throughout FY 1983. The BLM sought an alternative to the destruction of healthy animals, and the Interior Department supported legislation that would authorize the sale at public auction, in addition to the currently authorized destruction, of excess animals for which no adoption demand by qualified individuals exists. Two public hearings on the legislation were held by the Senate Subcommittee on Public Lands and Reserved Waters, but no further action on the legislation was taken by Congress. Excess animals were maintained in adoption centers for longer periods of time than in the past, increasing costs and reducing the BLM's ability to remove excess animals from the public lands. At the end of FY 1983, approximately 2,300 excess animals were being held in adoption facilities.

Regulations formally establishing adoption fees of \$200 per horse and \$75 per burro plus transportation costs (if any) were proposed in FY 1982. As a result of public comments on the proposed rule-making and an analysis of program costs, the final regulations published on March 4, 1983, lowered the wild horse fee to \$125 per animal. A provision requiring submission of a nonrefundable \$25 advance payment with the adoption application form also was included to reduce costs associated with maintaining the application file, screening applicants not seriously interested in adopting, and notifying them of the availability of animals.

The number of animals adopted increased slightly during the second half of FY 1983. New publicity efforts, the opening of a new year-round adoption center in Collinsville, Texas; and the increased use

of temporary adoption centers, particularly in the Eastern States, California, and Oregon; combined with the lower wild horse adoption fee to contribute to the improve outlook for the program. Twenty-seven temporary centers were operated during the year.

The final report of the National Academy of Sciences' Committee on Wild and Free-Roaming Horses and Burros, compiling the results of a 3-year, \$1.6 million study required in 1978 amendments to the act, was forwarded to Congress in January 1983. The report summarized and interpreted the results of five individual research projects contracted to western universities on wild horse and burro demography, census methods, nutrition, habitat preference and use, range relationships with other large herbivores, and impacts on vegetation, and made management-related recommendations to the agencies. While conclusions were limited in scope, the findings are being incorporated into guidance for field offices.

Population estimates were updated at the end of FY 1983, based on updated census results and extrapolation from previous years' information:

Estimated Current Populations

State	Horses	Burros
Arizona.....	115	3,625
California	4,106	5,900
Colorado.....	675	0
Idaho.....	811	0
Montana	141	0
Nevada	29,642	1,744
New Mexico	165	14
Oregon.....	3,748	25
Utah	1,636	50
Wyoming.....	7,959	0
Total.....	48,998	11,358

Six lawsuits filed against the Department of the Interior concerning various aspects of the wild horse and burro program were resolved in FY 1983, and one new suit was filed. The four outstanding cases address requests from private landowners that the BLM remove animals that have strayed from public lands.

c) Issues

Public concern continues to focus on four issues:

1) decisions on how many wild horses and burros will be managed on public lands and the number of excess animals that must be removed;

2) the disposition of excess animals;

3) the cost effectiveness of the removal and adoption program; and

4) the removal of straying wild horses and burros from private land.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Assistant Director, Renewable Resources

Field Administrators: State Directors

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	5,418	4,877	4,974

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	5,334	4,877	4,974
Work Years	102	95	90

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Million of Acres Inventoried ..	16.4	12.2	12.1
Number of Animals Adopted	7,250	5,095	6,330
Number of Herd Management Area Plans developed	11	15	10
Number of excess animals removed from public lands	9,350	6,658	6,392
Number of compliance checks (adopters).....	1,200	560	261
Number of titles issued.....	6,423	5,925	4,739

E. Support Services



E. SUPPORT SERVICES

E.1. LAW ENFORCEMENT

a) Program Description

Law enforcement efforts on the public lands administered by BLM began shortly before the passage of FLPMA. The Wild Free-Roaming Horse and Burro Act of 1971 provided basic authority for the hiring of BLM's first special agents. Amendments to the Sikes Act of 1974 and other subsequent special acts added additional authority in specified areas. But the passage of FLPMA provided general law enforcement authority for all BLM lands.

The legal jurisdiction on the public lands is proprietary (having less than absolute and exclusive right) in nature. Therefore, State law also applies to the public lands and their resources.

BLM relies on three separate levels for its total law enforcement program:

1) Special Agents, i.e., criminal investigators, who investigate major violations of Federal laws pertaining to the public lands. They are also responsible for total program coordination and liaison with State and local law enforcement officials.

2) Rangers, uniformed employees with law enforcement authority, currently are assigned only to the California Desert Conservation Area. They prevent violations by providing a high visibility through patrolling the public lands.

3) Law Enforcement Agreements with State and local police agencies that provide requested law enforcement services.

BLM law enforcement specialists estimate that 85 percent of their work involves crimes against property. Something of the value and diversity of public land resources affected can be seen in the list of cases that Special Agents have investigated in the last 5 years: timber theft, wild horse killing and theft, desert land entry fraud, removal and theft of cactus for commercial use, mineral theft, range arson, destruction of recreation sites, trespass on public lands, removal or defacement of antiquities, public lands survey marker destruction, oil and gas lease fraud, and the illegal growing of marijuana.

In 1983, BLM employed 17 Rangers and 26 Special Agents, all well-trained in law enforcement. Many of them have degrees in some phase of public land management, and all have completed an 8-week police training course at the Federal Law Enforcement Training Center or its equivalent.

b) Progress Report

In 1983, joining with other Federal, State, and local agencies, BLM made a good start toward eradicating marijuana on public lands in California, Oregon, Idaho, and other Western States.

California's Campaign Against Marijuana Planting (CAMP) program has been acclaimed by the State Attorney General, the Drug Enforcement Administration, the local sheriffs, and other Federal agencies. BLM played a leadership role in supporting and helping to organize CAMP in 1983. Over 65,000 plants were destroyed, representing an estimated \$130 million worth of marijuana.

The Oregon Command Center approach, in which BLM also participated, was equally successful, making seizures amounting to millions of dollars.

In cooperation with the Denver Service Center Scientific Systems Division, the Eastern States Office law enforcement staff has implemented a surveillance system for Federal mineral ownership areas using Landsat digital data gathered by satellite. The system was developed to reduce field detection time and provide an annual watch over large tracts too vast for effective ground patrol.

Major investigations were initiated regarding:

- Thefts of wild horses from the public lands;
- Thefts of timber;
- Theft of native desert vegetation in the Southwest; and
- Abuse of adopted wild horses and burros.

Convictions have been obtained in all these areas and several were precedent setting.

In addition to criminal violations, there are numerous cases of unauthorized use that are administrative or civil in nature. These also require law enforcement actions. Unauthorized use accounts for nearly 80 percent of all violations of regulations or laws that are used to administer the public lands.

BLM has established a Resource Protection Staff trained to deal effectively with both criminal and civil violations. This balance of law enforcement expertise provides for complete integration of the Resource Protection Program in natural resource management as suggested by BLM's Law Enforcement Program Analysis of October 1978.

c) Issues

An increasing area of activity in California and Oregon is BLM law enforcement assistance to local

law enforcement officials in the eradication of marijuana cultivated on public lands. It has been alleged that during the past 10 years, illegal growers in California have made the State a leading producer of domestic marijuana in the Nation. In Oregon the annual marijuana crop is estimated to be worth over \$400 million, with the Oregon State Police estimating that a significant portion of the marijuana in southwest Oregon is grown on BLM land. Other States having a relatively large marijuana industry on public lands are Washington, Arizona, Idaho, and Colorado. This illegal activity exists to some degree on BLM managed lands in all the Western States. A coordinated program that includes detection, employee awareness, public awareness, and a law enforcement strategy has been developed. It is believed that a moderately sized detection and enforcement effort that depends largely on cooperative agreements with local law enforcement agencies, together with an effective public information program, will go a long way towards minimizing the present problem and curtailing the growth of marijuana on the public lands in the future.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Assistant Director, Technical Services

Field Administrators: State Directors

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	1,553	2,022	2,036

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	1,412	1,933	2,036
Work Years	26	32	25

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
Cooperative agreements	52	37	46
Cases reported (estimated)...	653	650	650

E.2. CADASTRAL SURVEY

a) Program Description

Original cadastral surveys mark and define the legal boundaries of a tract of public land by establishing monuments or corner marks on the ground and recording their location in field notes and plats. These surveys serve as the basis for patents and other documents used for conveyance of public lands out of Federal ownership and for overall administration and management of lands retained in Federal ownership. Also included in the Public Land Survey System (PLSS) are Federal boundaries on the Outer Continental Shelf. BLM acquired responsibility for the administration and execution of cadastral surveys when the General Land Office was merged with the Grazing Service to form BLM in 1946.

Legally defensible boundaries are essential for identification of ownership so that the management of the public lands can proceed. Legal property descriptions are required for public land transfers, energy development, easement acquisition, timber sales, and right-of-way grants.

Cadastral survey also resurveys those areas where markers have become lost or obliterated for the purpose of reestablishing the boundaries between Federal, private, and state-owned land.

Cadastral survey information is depicted on a base through the use of cartography. The accurate portrayal of the PLSS land records and status on a geographically referenced base is of prime importance to land managers, both public and private. Many of the BLM mapping requirements are satisfied through cooperative efforts with other Federal agencies.

Much of cadastral survey's work in the Lower 48 States is performed on a reimbursable basis for other Federal agencies. BLM performs surveys and resurveys for the Forest Service, Bureau of Indian Affairs, National Park Service, the Bureau of Reclamation, U.S. Fish and Wildlife Service, the Department of Defense, and occasionally the Department of Justice. Unless approved by BLM, public land surveys do not carry the full weight of Federal law and do not become part of the public land records system. The Forest Service (FS) and the National Park Service (NPS) have each signed a Memorandum of Agreement with BLM that cites the conditions under which personnel of the FS and NPS can execute field surveys under BLM special instructions and subject to BLM's official approval.

Original survey work remains a major program element in Alaska, where 90 percent of all original survey work is now performed. The Alaska State-

hood Act of 1958 required the State to select 105 million acres of Federal lands within 25 years. The task of surveying those lands was compounded by the Alaska Native Claims Settlement Act of 1971 (ANCSA), which provided for a grant of 44 million acres of Federal land to the State's Eskimos, Indians, and Aleuts, as well as for the designation of additional acreage as national parks, wildlife refuges, national forests, and wild and scenic river areas. Before title to any of this land can be transferred to Natives or to State and Federal agencies, boundaries must be surveyed, private rights identified, and municipal boundaries and specialized sites defined.

This sudden increase in surveys needed in Alaska spurred BLM to find new survey technologies. The Auto-Surveyor, an inertial guidance system that can identify an in-flight aircraft's exact longitude and latitude position, continued to help meet these survey needs. The continued use of contractors to perform large-scale original surveys also assisted with Alaska survey needs.

b) Progress Report

BLM has surveyed on the ground roughly 80.1 million or 53 percent of the 149 million acres of boundary survey work in Alaska required under the Alaska Statehood Act and the Alaska Native Claims Settlement Act prior to land transfers to the State and to Native groups. These boundary surveys require processing for final plat acceptance and do not complete the survey work needed to convey the lands to the Natives and the State. The internal surveys to identify private rights are still needed. In addition, 282.4 million acres remain unsurveyed in Alaska, including the millions of acres of surveys needed to identify boundaries of national parks, forests, wildlife refuges, and wild and scenic rivers created by the Alaska National Interest Lands Conservation Act. In addition, 15.9 million acres of land presently remaining under BLM jurisdiction have been surveyed.

New survey technology continues to be tested to reduce the cadastral survey program's enormous

backlog. Plans for FY 1984 include expanded use of the Auto-Surveyor system to observe direct field meanders of segregatable waters to be identified on the existing ground surveyed lands. This action, combined with the expanded program of photographic identification of water boundaries on similarly surveyed lands, will provide the additional data necessary to prepare final plats on approximately 2,200 townships now surveyed on the ground but unaccepted pending the determination of comprehensive meander-line data.

c) Issues

The backlog of unsurveyed public land is the primary issue in the cadastral survey program. Almost 300 million acres of public land have yet to be surveyed. It is estimated that it will take several years to complete these surveys.

d) Budget and Performance Analysis (Alaska Program)

1) Administrative Responsibility

Program Administrator: Assistant Director, Technical Services

Field Administrator: State Director, Alaska

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	9,607	9,992	12,140

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	9,795	9,620	12,140
Work Years	158	161	170

Acres Required to be Surveyed	Through FY 1982	Estimate FY 1983	Remaining to be Surveyed	Planned for Completion by
ANCSA (44,000)	28,058	3,430	12,512	1990
State Sections (104,450)	45,846	88	58,516	2005
All Other (214,050)	41,929	0	172,121	2000 +
Total (362,500)	115,833	3,518	243,149	-

e) Budget and Performance Analysis (Lower 48 States)

1) Administrative Responsibility

Program Administrator: Assistant Director, Technical Services

Field Administrators: Director, Denver Service Center & State Directors

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	10,031	11,602	11,407

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	9,938	11,369	11,407
Work Years	304	348	330

4) Performance

Work Units	1982 Enacted	1983 Enacted	1984 Proposed
Cartography (number)	404	•-	-
Original Survey (miles)	85	•-	-
Resurveys (miles)	3,216	•-	-
Special Surveys (miles)	33	•-	-
Re monumentation (number)	395	•-	-

*Actual figures will not be available until FY 1984.

E.3. ENGINEERING

a) Program Description

The construction and maintenance programs construct and maintain facilities needed to provide services for visitors to the public lands. These programs also provide support to resource management of the public lands including all phases of new construction/planning, environmental analysis, survey, design, and contracting operations; and provide timely maintenance for BLM owned building, recreation, and transportation facilities. These broad responsibilities are relatively new.

When BLM was established in 1946, its physical facilities were inherited from its parent agencies, the General Land Office and the Grazing Service. Building space was provided by the General Serv-

ices Administration. A primitive road system on the public lands reflected the miscellaneous access needs of ranchers, mining companies, railroads, and county and state governments. In addition, many miles of somewhat less primitive road built by the Civilian Conservation Corps in the 1930's were inherited. Recreation facilities were nonexistent or at best, very primitive.

As its role in managing the public lands grew, BLM obtained facilities from other agencies, such as the Civilian Conservation Corps and the various States and counties. Investment in construction on the lands remained extremely modest, however, because BLM was still considered an interim custodian of the land pending ultimate disposition. New road construction was limited to those necessary for the development of timber resources in Oregon, California, Idaho, Colorado, Montana, and Wyoming. Building construction until 1963 was limited to firefighting facilities in Alaska.

In the 1960's, BLM's custodial role gave way to the concept of retention. The new policy was stated clearly in the Classification and Multiple Use Act of 1964 and in the legislation creating the Public Land Law Review Commission. During this same time, public use of BLM lands rocketed, especially recreational use. The existing primitive road system was inadequate for the heavy influx of a new kind of traffic--automobiles and recreational vehicles. In 1964, contract authority under the Public Lands Development Roads and Trails Appropriation empowered BLM to construct "roads or trails which the Secretary of the Interior determines are of primary importance for the development, protection, administration, and utilization of public lands and resources under his control." In 1978 this appropriation was dropped and replaced by a transportation construction portion in BLM's regular Construction and Maintenance Appropriation.

Recreation facilities, including sanitary facilities, picnic tables, fire rings, well-water supplies, and visitor service facilities also were constructed to accommodate some of the roughly 55 million annual visitors who camp, hike, picnic, hunt, fish, raft, rock-hound, or drive recreational vehicles on the public lands.

By 1967, BLM had begun to construct its own office buildings, warehouses, shops, and other facilities tailored to BLM's resource management responsibilities. Although BLM continues to obtain most of its building space from the General Services Administration, rapid growth and the shortage of facilities available for lease, especially in remote locations, often force BLM to construct its own. Specialized structures such as telecommunication buildings at remote locations, well pumping build-

ings, seed storage bins, greenhouses, and warehouses also are frequently built to order.

b) Progress Report

Maintenance was provided to 579 structures, including office buildings, warehouses, shops, storage buildings, fire stations, lookouts, and related facilities such as parking areas during FY 1983. Special emphasis has continued to be placed on corrective maintenance and retrofit for energy conservation. The maintenance program has emphasized the reduction of fuel consumption through such measures as the installation of storm windows and doors and the addition of insulation.

During FY 1983, BLM completed construction of one bridge and performed maintenance on approximately 8,750 miles of road, 215 miles of trail, and 10 bridges, emphasizing those that receive the greatest use and have the highest erosion potential if maintenance is deferred.

During 1983, BLM obtained an updated status report on the condition of its bridges and identified major maintenance and/or replacement needs.

Transportation construction, with the exception of timber access roads, has been at a low level pending completion of resource management plans and wilderness reviews. It is not anticipated that the completion of these plans will change the transportation construction and maintenance programs.

During FY 1983, phased construction continued on two recreation sites. BLM has identified other planned projects throughout the West and in Alaska, including visitor centers, sanitary facilities, cave protection work, campsites, and information stations. Recreation facility maintenance in FY 1983 involved minimal work at approximately 1,000 undeveloped sites (sites without water) and at 436 developed campsites containing varying numbers of individual sites. In addition, more than 180 hazards were removed or mitigated by such methods as filling abandoned mine shafts, removing dead trees, or barricading cliffs to improve visitor safety.

c) Issues

As BLM's program responsibilities expand to keep pace with public interest in and use of its lands, construction and maintenance become increasingly pressing concerns. Lack of office and storage space are often recurring problems. In spite of these problems, BLM increasingly emphasizes its maintenance responsibilities as the intensity of public use of its facilities increases.

Increasing use of BLM roads and trails results in erosion problems because few BLM roads were designed for present use levels or for passenger vehicles. Poor drainage control can result in a soil loss of as much as 100 tons per mile of poorly surfaced road each year, and many of these roads can be used only seasonally. Of the 64,000 miles of existing road, 20,000 are primitive and their primitive character can be hazardous to visitors accustomed to the highly developed roads in urban areas.

BLM constructs and maintains its transportation system to support its own resource management objectives, and does not construct public roads. However, as population pressures increase, so do demands for BLM to construct and maintain its roads to State and county road standards, or in other terms, to construct public roads. To meet such demands, the only option short of closing the road is to transfer some roads out of BLM authority to local public road authority.

Considering the need for recreation facilities (in 1978 it was estimated that existing facilities accommodated less than 15 percent of demand), BLM constructs and maintains a very modest number of functional facilities for use by the general public. Particular problems relating to high visitor use occur in the California Desert, along the Colorado River between California and Arizona, in caves in New Mexico, in the El Malpais areas of New Mexico, in the Little Sahara sand dunes in Utah, and on the upper Missouri River in Montana. Current plans are to pace new construction with the completion of resource management plans to ensure that BLM is fully prepared to deal with increased use.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Assistant Director, Technical Services

Field Administrators: District Managers

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	--	989	936

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	--	987	936
Work Years	--	26	22

4) Performance

Work Units	1982 Actual	1983 Actual	1984 Planned
BUILDING			
Project Survey & Design (number)	2	1	0
Construction (number)	6	0	1 (Car- ryover)
RECREATION			
Project Survey & Design (number)	2	2	0
Construction (number)	2	2	1 (Car- ryover)
TRANSPORTATION			
Project Survey & Design....			
1)Bridges (number).....	3	0	0
2)Roads (miles)	0	0	0
Construction			
1)Bridges (number).....	2	1	0
2)Roads (miles)	35	0	0
BUILDING MAINTENANCE			
Buildings (number)	579	579	579
RECREATION			
Hazard Reduction (number)	180	180	180
Recreation Buildings (number)	1,436	1,436	1,436
TRANSPORTATION			
Roads (miles).....	8,750	8,750	10,500
Inventory (miles).....	1,200	500	1,000

E.4. FIRE AND AVIATION MANAGEMENT

a) Program Description

The Fire Management Program shares with the rest of BLM the broad purpose of protecting and enhancing the resources of the public lands in order to preserve their capability to meet the resource needs of the Nation. More specifically, BLM is responsible for protecting property and natural resource values on the public lands from wildfire, rehabilitating areas damaged by wildfire, and ensuring that "prescribed burning" designed to accomplish a variety of resource management objectives is safely conducted and controlled.

BLM carries out these responsibilities on approximately 380 million acres, including some land administered by other Federal agencies, States, and private parties. It contracts with other Federal, State, and private agencies to protect roughly 6 million acres of this total. Approximately 170 million acres, or half the total, are in Alaska.

BLM has entered into cooperative agreements on fire suppression with other agencies, providing for

fire suppression resources to be shared by the BLM, National Park Service, U.S. Fish and Wildlife Service, Bureau of Indian Affairs, and Forest Service. States may also benefit from this arrangement where agreements have been negotiated.

The Boise Interagency Fire Center (BIFC) in Idaho is BLM's fire support center. It is the central location for Bureauwide fire training development, fire communications development, fire equipment overhaul, and the fire supply cache. BIFC coordinates project fire (large, complex fires) suppression activities throughout BLM lands in the 11 Western States and Alaska. During periods of extreme fire problem, BIFC assists other Federal fire fighting agencies.

Recent trends show an increase in the number of person-caused fires and a decrease in the acreage burned for two reasons. First, increased use of public lands has raised the incidence of fire, even though fire prevention programs have kept the rate of this increase lower than the rate of increased use. Second, in 1972 BLM modified its priorities from combating large "disaster" fires and improved both its initial attack capabilities and early fire detection systems. Consequently, most wildfires are now brought under control sooner and the acreage burned is less than in the past.

BLM's plans for carrying out its fire management responsibilities are contained in the Normal Fire Year Planning System developed for each BLM District. In the Normal Fire Year Plan, BLM categorizes all public lands into classes of fire problems. These fire problem classes are based upon historical data of fire occurrence, the value of resources threatened by fire and the estimated behavior of a fire. Operational plans for resolving the fire problem of each class are then developed, tested, and evaluated for effectiveness. The final force structure and equipment needs displayed in the plan become the basis for the annual budget. BLM's comprehensive Normal Fire Year Plan was updated completely in 1979.

As techniques for controlling fire have improved, all Federal agencies having wildfire suppression responsibilities have been able to adopt new procedures to use fire as a resource management tool. Prescribed burning is used to enhance wildlife habitat, improve range forage mixes, improve watersheds, improve the visual backdrop, and remove forest harvest residue, as well as many other applications.

Aviation management is a part of the fire management program and also provides BLM-wide guidance in aircraft use policy and procedures development, operational assistance, safety, and training. The aviation staff consists of an aviation manager

in the Washington Office, Division of Fire and Aviation Management and an aviation manager with one assistant located at BIFC for field operational guidance and assistance. Aviation activities are carried out under Federal Aviation Agency regulations and the policies established by the Office of Aircraft Services, Department of the Interior. Activities are coordinated with other agencies with like missions.

b) Progress Report

The 1983 fire season was below average in terms of number of fires and above the 5-year average in terms of acreage burned. In spite of the full implementation of the automatic lightning detection system and a continuing effort to upgrade the initial attack capability, weather patterns created a situation leading to larger than usual fire losses. A warm, wet spring creating a heavy grass cover and followed by a summer with a high number of dry lightning storms led to a larger than usual fire size. For example, one fire in Utah burned over 200,000 acres early in the summer, making it one of the largest fires to occur, outside of Alaska, in a number of years.

BLM's 1983 achievements were:

1) Phase I of the Initial Attack Management System (IAMS) nearly was completed during this year. This consisted of acquisition of the computer and graphic terminals. Additional fuels mapping and placing of the Remote Automatic Weather Stations (RAWS) continued during FY 1983--with additional mapping planned in FY 1984 and future out-years.

2) The Alaska Fire Service (AFS) completed its first full season of operation as the fire suppression agency for all Interior-managed lands in Alaska. Good success was achieved by AFS in initial attack on wildland fires. Out of 467 fires that were attacked by AFS forces, only 4 became project size. The other agency land managers feel they have an excellent relationship with the Alaska Fire Service.

3) The interest in the use of fire to achieve resource management objectives continues to increase, and is being translated into a larger number of acres being planned for prescription burns. Four years ago, 15,000 acres would have been considered as a large acreage for treatment by fire in a BLM State; in 1983 it is commonplace for individual district offices to plan to burn this many acres.

4) During 1983 BLM aviation management established Bureauwide standard operating procedures for accident/incident reporting, investigation, and followup system; user level training courses; and interagency aviation contract standardization. BLM appointed a National Aviation Management Com-

mittee to develop and field test new methods and procedures.

c) Issues

1) BLM is continuing to program and plan for fire suppression efforts with the Alaska Fire Service. Planned FY 1984 funds will maintain AFS in the upcoming fire season; future fire planning will assist in determining the extent of cooperative funding needs between the BLM, National Park Service, U.S. Fish and Wildlife Service, and Bureau of Indian Affairs.

2) BLM along with other land management bureaus and agencies uses the Department of Commerce "GOES" satellite (Geostationary Orbiting Earth Satellite) as a communications platform to transmit RAWS data. The shared cost of anticipated upgrading of the satellite capability and future use fee levels could become prohibitive for BLM. Present costs for this type of service could increase many times.

d) Budget and Performance Analysis (Fire Management)

The cost of suppressing major wildfires and subsequent rehabilitation work is traditionally reimbursed by the Congress in the following budget year.

1) Administrative Responsibility

Program Administrator: Assistant Director, Technical Services

Field Administrators: State Directors and District Managers

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	7,231	9,334	7,446

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	7,124	8,809	7,446
Work Years	153	149	145

4) Performance

	1982 Actual	1983 Actual	1984 Planned
Fire management plans (number)	6	6	6
Prescribed burns (number)....	80	85	150

Firefighting and Rehabilitation

5) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	*64,560	^b 49,750	4,750

*includes \$5 million payback from O&C

^bincludes \$4,750 appropriated and \$45,000 1983 fire season supplemental

6) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	58,090	46,487	4,750
Work Years	1,021	1,065	896

7) Performance

	1982 Actual	1983 Actual	1984 Planned
Number of Fires.....	1,887	1,964	N/A
Acres burned	278,015	835,208	N/A

E.5. GENERAL ADMINISTRATION

a) Program Description and Progress Report

General administration includes certain fixed costs such as rent and telephone, as well as executive direction and the following functions in Washington and at the Denver Service Center: personnel management, employee and visitor safety, administrative services, evaluation, and management research. Evaluations and audits are discussed in the following section, E.6.

1) Personnel and Training

During FY 1983, the Division of Personnel and Training concentrated much of its efforts in the support of the BLM-Minerals Management Service (MMS) Onshore merger. Activities related to position classification and placement issues were of

paramount concern. All efforts were carried out with the intent of adhering closely to Departmental guidance on merger objectives and to the principle of maximum protection of employees' rights and current grade and pay levels. Specific actions taken in this regard in FY 1983 were:

- Active participation in merger assistance teams which visited several States to assist in and evaluate merger-related efforts.
- Issuance of guidance to field offices pertaining to specific classification practices to be followed to ease the merger.
- Development of a multi-faceted priority placement plan designed to ease placement actions at all levels of BLM.
- Establishment of a centralized recruiting effort in DSC for Petroleum Engineering Technicians.
- Active participation in a functional stratification study of the Inspection and Enforcement program.
- Training of BLM field managers for managing complex minerals issues in a multiple use environment. Subjects covered included basic information needed for BLM management decisions, including minerals resource assessment, exploration, and development. In all, over 225 field managers were trained in three sessions of 2 weeks each.

The BLM also continued progress towards placing many multi-use management field positions in the GS-301 and GS-340 series. This was done in order to facilitate movement of individuals with a variety of backgrounds and disciplines into management jobs. The Division also worked with management in setting up new minerals related organizations in those areas with heavy energy and minerals program functions as part of the merger effort.

2) Employee and Visitor Safety

Reduction of accidental loss is vital to the accomplishment of BLM's mission and to its public service commitment. BLM management officials are committed to a dynamic occupational safety and health program for employees and to the safe enjoyment by the public of the Nation's public lands. Field offices during FY 1983 continued their occupational hygiene surveys and "job hazard analyses" to identify and abate environmental hazards and unsafe work practices. In FY 1983 the downward trend in accidents continued.

3) Administrative Services

Procurement, property and space management, printing, directives, and forms management fall under the responsibility of the Division of Administrative Services.

The support of public land management efforts requires 5.3 million square feet of improved real property. Of this, BLM has direct jurisdiction over 1.8 million square feet of space. BLM employs the open space concept of space arrangements wherever possible to improve space allocation and provide flexibility.

The FY 1983 merger of onshore program responsibilities from MMS with BLM required extensive work to accomplish office consolidation actions. BLM opened offices at three new geographical locations, initiated transfer to the BLM of 44 MMS space assignments, and submitted 28 requests for space to GSA for new or additional office space to accomplish the merger. Extensive work was also required to inventory and transfer to the BLM property system more than 5,000 items of onshore personal property, including 250 agency-owned motor vehicles. The total value of personal property assets transferred to BLM in the merger is more than \$6 million.

The BLM prepared an agency space reduction plan in response to a revision to 41 CFR 101-17 in March 1983. The objective was to achieve an overall office space utilization rate of 135 square feet per person in GSA-controlled space. BLM's space reduction plan proposed an average utilization rate of 164 square feet per person, taking into consideration the requirements for public rooms, central files area, land plat storage, etc. Interior's consolidated space reduction plan was submitted to GSA in June 1983, and conditional approval has been received from GSA.

A similar exercise covering BLM-owned or leased space was performed to comply with Executive Order 12411 and submitted to the Department on August 31, 1983. BLM's plan proposed an average utilization rate of 160 square feet per person, which includes an allowance for public areas, etc., as mentioned related to the GSA space reduction plan. Interior's consolidated agency-controlled space plan was submitted to GSA in September 1983.

Continuing efforts to reduce costs associated with BLM's fleet resulted in 104 fewer permanently assigned and owned vehicles in FY 1983 than were maintained for the same period in FY 1982, excluding the 250 vehicles acquired in the merger with MMS onshore operations. These acquisitions bring the total fleet to 5,042 units, which is 63 percent GSA-provided. These units were driven for 43.5 million miles in FY 1983. The reduced number of vehicles resulted in improved utilization of the fleet and savings of more than \$150,000 in vehicle depreciation or rental costs.

A 3-year effort to modernize and standardize the BLM's word processing network has culminated in

a contract award to Wang Laboratories, Inc. Prior to soliciting for bids, BLM undertook a nationwide study to assess word processing needs and evaluate the manner in which typing workload is handled. Through this study, equipment configurations were recommended to provide a cost justifiable level of word processing support. The results of this competitive award are expected to yield about \$500,000 in annual savings directly related to word processing. Beyond that, however, are less quantifiable savings related to the more sophisticated functions and performance that is now available, such as spread sheet analysis and list processing.

Coupled with this effort to standardize and modernize BLM's work processing network, BLM headquarters received approval from the Congressional Joint Committee on Printing to acquire an automated phototypesetter which will work in conjunction with our word processing network. Anticipated savings in printing and graphic arts costs are \$75,000 per annum.

As part of strengthening our Bureau forms management program, we have cancelled over 100 BLM forms in FY 1983. This is an increase of 70 percent over past years. Savings are approximately \$5,000 per year. In addition, only 32 new BLM forms were approved in FY 1983. In the past, BLM produced an average of 56 new forms per year.

An Automated Inventory Management System will be installed at our Denver Service Center. This system will allow for automated tracking of costs, and issues for BLM forms, publications, and other printed matter. We anticipate a savings of approximately \$30,000 to \$50,000 per annum through application of improved inventory management techniques.

During FY 1983, BLM spent \$58.3 million for goods and services. Even though BLM gained responsibilities for onshore minerals management, this figure has decreased from previous years because of the transfer of BLM offshore mineral functions to MMS. Formal contracts over \$10,000 awarded by the Washington Office, Denver Service Center, and Oregon State Office to support field programs totaled \$25.4 million. Field offices expended an additional \$32.9 million, mostly for small purchases.

In BLM's support of various socioeconomic programs, BLM has established aggressive goals and exceeded them all.

FY 1983 Goals and Achievements (\$ Millions)

	Goal	Actual Contract Awards
Minority Business Awards	\$ 3.2	\$ 3.5
Labor Surplus Area Setasides	4.5	9.6

FY 1983 Goals and Achievements (\$ Millions)—Continued

	Goal	Actual Contract Awards
Small Businesses	29.2	34.9
Women Business Enterprises.....	.9	1.3
Historically Black Colleges.....	.060	.065

BLM began development of a procurement planning system to track and monitor timely awards of procurements to avoid unnecessary fourth quarter obligations.

4) Management Research

The Division of Management Research analyzes and directs organization and management system changes and implementation. Organizational structures and management systems have been developed that provide for responsive decisionmaking at the field level. Many functions have been decentralized, and authority for organizational changes, personnel management, and appraisals has been delegated to the States. The Division of Management Research has provided guidance and assistance to both Headquarters Office and the field in development and implementation of the organizational structure and functional alignment resulting from the merger of onshore mineral operation functions into BLM.

b) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Assistant Director, Administration

Field Administrators: Delegations vary between different functions and within the same function so that a general identification of field level administrators is not possible.

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	77,180	75,865	81,302

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	76,832	75,700	81,302
Work Years	1,312	1,238	1,300

E.6 EVALUATIONS/AUDITS

The Bureau's Division of Program Evaluation in the Headquarters Office conducts internal evaluations of BLM programs, general management, and special issues. The U.S. General Accounting Office (GAO) and Interior's Office of the Inspector General (OIG) conduct audits of various BLM programs or functions.

A. Internal Bureau Evaluations

In FY 1983, the Division of Program Evaluation conducted three General Management Evaluations and one special evaluation. The Division also worked with individual States to help them develop their evaluation programs. The following lists the evaluations conducted in FY 1983 by the Division:

Arizona General Management Evaluation, March 1983

Oregon General Management Evaluation, April 1983

Idaho General Management Evaluation, June 1983

Bureauwide Merger Implementation Special Evaluation, September 1983

B. GAO Audits

The General Accounting Office issued 11 final reports in FY 1983 affecting the Bureau of Land Management. A list follows:

Interior's Report of Shut-In or Flaring Wells Unnecessary, But Oversight Should Continue (GAO/RCED-83-10) October 5, 1982

Interior's Program to Review Withdrawn Federal Lands--Limited Progress and Results (GAO-RCED-83-26) October 7, 1982

Public Rangeland Improvement--A Slow Costly Process in Need of Alternate Funding (GAO/RCED-83-23) October 14, 1982

Changes Are Needed to Improve the Management of the BLM's Financial Disclosure System (GAO/PFCD-83-16) October 18, 1982

Coal Exchange Management Continues to Need Attention (GAO/RCED-83-58) March 7, 1983

Costs and Uses of Remote Sensing Satellites (RCED-83-111) March 11, 1983

Opportunity to Increase Oil and Gas Exploration and Lease Rental Income (GAO/RCED-83-77) April 28, 1983

Analysis of the Powder River Basin Federal Coal Lease Sale: Economic Valuation Improvement and Legislative Changes Needed (GAO/RCED-83-119) May 11, 1983

Federal Civilian Agencies Can Better Manage Their Aircraft and Related Services (GAO/PLED-83-64) June 24, 1983

Information on Alaska Native Corporations (GAO/RCED-83-173) August 16, 1983

Compliance with the Department of the Interior's Cost Recovery Program Could Generate Substantial Additional Revenues (RCED-83-94) September 6, 1983

C. OIG Reports

Review of Inventory and Overtime Practices at the BIFC (W-LW-BLM-02-82) October 27, 1982

Review of Procurement Activities, BLM (C-LW-BLM-06-82) January 26, 1983

Review of Selected Aspects of the BLM's Financial Management System (C-LW-BLM-07-81) March 10, 1983

Review of Cash Collection at the Santa Fe State Office and the Las Cruces and Albuquerque District Offices, New Mexico State Office, BLM (C-MO-MOA-11-83E) April 22, 1983

Quarters Rental Program (W-LW-BLM-12-83) May 5, 1983

Review of Cash Collections and Imprest Funds at the Utah State Office, the Moab District Office, and the Grand Resource Area Office (C-MO-MOA-11-83J) June 28, 1983

E.7. DATA MANAGEMENT

a) Program Description

BLM initiated a study in 1974 to determine its data management requirements for resource and administrative programs. The resulting "Strategic Plan for Information Systems Management" is the principal BLM guide for developing data systems. It calls for a 7-to 12-year effort to improve data storage, manipulation, and analysis. In FY 1982 this plan was updated to identify current priorities and achieve cost efficiencies.

The plan calls for BLM data management capabilities to include: 1) a series of data banks to replace voluminous existing files; 2) easier access to data by headquarters and field offices; 3) capability for remote entry, update, and retrieval of data; 4) avail-

ability of textual, numeric, and graphic material in the format desired by the user; 5) land use and yield trend information; 6) word processing; 7) production of year-end and other periodic reports; and 8) the capability to process and analyze data to assist management in making better resource decisions.

FLPMA gave BLM a strong legislative mandate for comprehensive land use management, a mandate that was further underscored by the Public Rangelands Improvement Act in 1978. The more recent Paperwork Reduction Act of 1980 emphasizes sound use of automatic data processing in the Federal Government. To comply with these mandates and other national needs and respond to a rapidly growing need for analysis of large amounts of data, BLM is expanding its automated capability for gathering, storing, processing, and retrieving resource and other pertinent information. This program includes remote sensing, micrographics, and various aspects of telecommunications, as well as the traditional automatic data processing elements.

The computer systems being developed will support one or more of the program functions related to management of energy and minerals, lands, range, forestry, watershed, wildlife, recreation, cadastral survey, fire protection, roads and trails, access, transportation and rights-of-way, personnel, property, and financial systems. Under the concept advocated by the Commission on Federal Paperwork and being implemented by BLM, all information storage, manipulation, and retrieval capabilities are managed as an integrated set of activities.

The scientific systems program promotes the use of automated technology to reduce the time and workmonths required to collect, store, display, and analyze natural resource information. The program is responsible for:

- Interpreting environmental information obtained from space satellites to inventory vegetation, soil, and mineral resources on public land, and to monitor ground conditions over time.
- Developing automated geographic information systems to analyze the interaction of the many sets of data required for predictive modeling and identifying management opportunity in land use decisions.
- Demonstrating significant dollar, time, and work-month savings for BLM, and providing more efficient decisionmaking tools for management.

b) Progress Report

- 1) Automatic Data Processing

Emphasis in FY 1983 was directed towards improving ADP organization and guidance in BLM and continuing the normal operation and maintenance efforts to support Bureau programs.

Efforts continued to improve present and long term operations. An interagency agreement with the Department of Energy (DOE) was negotiated during FY 1983 to provide guidance and assistance to BLM for selected development projects. The present workload of the staff and the full load on the DPS-8 mainframe mandated obtaining this specialized technical assistance from DOE.

The BLM's on-line mining claim recordation system (MCR) is now on a pipeline basis. Over 1.6 million MCR cases have been entered into the automated system. Of the 1.6 million cases, 23 percent or 374,779 have been microfilmed. After microfilming, the MCR cases are disposed of in accordance with prescribed regulations (returned to climate or destroyed). This has resulted in space savings of 1,369 sq. ft. and a recurring savings of \$16,428.

2) Scientific Systems

BLM increasingly uses aerospace technology to help natural resource managers plan the most effective use of scarce management assets--personnel, time, and money. Data processing facilities now are nearing full capacity use. In FY 1983:

- BLM natural resource managers used information from Landsat imagery to inventory soil types and vegetation on about 40 million acres of public land in Arizona, Colorado, Idaho, Nevada, New Mexico, and Wyoming. This represents savings of more than eight cents an acre over traditional, labor-intensive ground inventories, and an increase of ten million acres over the amount of land inventoried in FY 1982 using Landsat.

- BLM resource protection staffs used automated techniques to compare time series Landsat digital data and identify variations in electromagnetic energy reflected from widely separated parcels of Federal mineral ownership. With this information, they monitored areas in Arkansas, Missouri, Illinois, and Ohio to guard against unauthorized removal of public resources.

- BLM fire management staffs used radiometry from NOAA weather satellites to identify wild-fire fuel types for the Automated Initial Attack System data base, and to monitor the quantities and curing of annual vegetation. Fire-fighters applied this information to predict ignition probabilities, fire intensities, and spread velocities in Oregon, Arizona, and Alaska.

c) Issues

Increased use of ADP and remote sensing techniques is necessary if the BLM is to meet local, State, and national needs. Technology-intensive rather than labor-intensive methods must be used to meet the increasing demands on the public lands, while reducing Government spending. Expanded use of such cost-effective tools needs to be recognized as a key challenge as well as an opportunity.

d) Budget and Performance Analysis

1) Administrative Responsibility

Program Administrator: Deputy Director for Services

Field Administrators: State Directors

2) Funding

	1982 Enacted	1983 Enacted	1984 Proposed
Appropriation (\$000s)	12,012	12,932	13,914

3) Program Obligations

	1982 Enacted	1983 Enacted	1984 Proposed
Dollars (\$000s)	11,690	12,209	13,914
Work Years	215	207	207

4) Performance

N/A

E.8 VOLUNTEERS AND OTHER CONTRIBUTED SERVICES

a) Program Description

In accord with FLPMA Section 307, which authorizes BLM to accept contributions of services, and in response to current public interest and public policy, the BLM expanded its use of the services of volunteer and other supplemental workers during FY 1983.

Policies and processes were adopted for recruiting and making effective use of contributed services--in cooperation with a diversity of local community service clubs, youth organizations, and outdoor activity interest groups, as well as individual citizen volunteers.

In addition to volunteers, the BLM's activities in this field include participation in the Student Conservation Program and the Senior Community Service Employment Program.

Most contributed services involve on-the-ground public land renewable resource projects such as improving fish and wildlife habitat, rangelands, forest lands, and watersheds; soil and water conservation; developing and maintaining trails, campgrounds, and other recreational resources; and protecting or restoring of archeological and historic sites. These workers also contribute their time, talents, and skills to assist with geology and mineral assessment, surveying, engineering, planning, public affairs, and administrative support.

Progress Report

During the year:

The BLM's basic operating policy in this field became more activist. It now calls for:

"managers of all units to actively take the initiative to seek out and recruit volunteers and other supplemental workers, and to utilize their services to the maximum extent feasible wherever a Bureau project, service or operation could thereby be accomplished, supplemented, complemented, enhanced or improved."

Further, rather than merely react to proposals initiated by prospective volunteers or others outside the BLM, the current policy directs managers "to identify in advance our priority needs for such services, by proposing and describing suitable projects prior to recruiting."

1) At BLM's invitation, four Federal land-managing agencies conducted the first national Volunteers Program Workshop in Colorado. The 120 participants from the National Park Service, Forest Service, and U.S. Fish and Wildlife Service--as well as BLM--exchanged ideas and experience on achieving such common objectives as:

Raising the level of professionalism in volunteers program management in natural resources agencies;

Improving cost-effectiveness of volunteer projects through such innovations as utilizing a volunteer as an area's volunteers program coordinator;

Using an area's volunteers projects to build mutually rewarding partnerships with public service civic groups and other citizen organizations in nearby communities; and

Integrating the "volunteer worker resource" into an area's basic natural resources management program from the beginning.

2) The BLM produced and distributed to field managers several relevant publications:

A recruiting brochure, *You're Invited to Make a Difference as a Volunteer for America's Public Lands*.

A guidebook, *Working with Volunteers: A Guide for Managers*. In addition, a more specialized guide for attracting and making good use of the services of geology students and other volunteers in geological and mineral assessment field work is being developed. This is envisaged as first of a set of aids for special applications of volunteers in public lands management.

A certificate acknowledging appreciation for "Volunteer Service for America's Public Lands."

3) Some 70 BLM field areas secured services of 230 college student "Resource Management Assistants" for 12-week paraprofessional work projects. The students worked under the guidance of BLM professionals in virtually all the natural resource disciplines. The students, who are not paid for their services, receive educational and career preparation benefits from their service with the BLM's Student Conservation Program, operated in cooperation with the Student Conservation Association, a nonprofit educational organization.

4) BLM field areas stepped up their use of the services of other volunteers, ranging from retired persons to high school students. In all, during FY 1983 more than 2,500 persons contributed more than 289,000 hours of service, which BLM field officials estimated resulted in work accomplishment worth about \$1,895,000, at a cost to the Government of about \$325,000 for supplies and guidance.

5) The Bureau explored, at the request of several state and local governments, possible cooperative arrangements whereby persons serving sentences in correctional systems or persons under court order for offenses could do useful work on the public lands as an alternative to confinement in jail.

6) In addition, during the year more BLM offices began to participate in the Senior Community Service Employment Program, under which low-income workers 55 years of age and above receive on-the-job training in the course of their half-time work with host agencies. By year's end, BLM offices in eight Western States were serving as hosts to 25 such older workers, in cooperation with sponsors including Green Thumb Inc., the American Association of Retired Persons, and several State agencies.

c) Issues

Legislation to supplement BLM's basic FLPMA-provided authority to accept voluntary services advanced in the Congress in 1983. Enactment would make it possible for BLM's field managers to reimburse their volunteer workers for certain of the out-of-pocket expenses that inevitably are involved in doing volunteer work. Provision of this authority would place BLM on equal footing with the other principal natural resource agencies, which have made good use of it for years.

It would enable more people with modest incomes--such as many students and retired persons--to serve as volunteers for the public lands. In an interim action pending enactment of this long-term legislation, the Congress provided in the Department of the Interior's FY 1984 appropriations act authority for BLM to provide for such expenses during FY 1984 on a case-by-case basis.

Funds to pay for such incidental expenses would be paid--as are all expenses of BLM's volunteers program--from regular appropriations available to the benefitting BLM areas and activities, such as range rehabilitation, wildlife habitat improvement, campground construction, or mineral assessment.

V. Appendix



V. APPENDIX

BLM Organizational Structure

The Bureau of Land Management was established July 16, 1946, through consolidation of the General Land Office (created in 1812) and the Grazing Service (formed in 1934) as set forth in the President's Reorganization Plan 3 of 1946. Since 1946, BLM has evolved into a decentralized, line and staff organization.

BLM Headquarters Office, in Washington, D.C., is headed by the Director and Associate Director. They are supported by three Deputy Directors who function as line officials and who, together with the Director and Associate Director, provide top-level executive leadership and management.

The Headquarters Office develops and translates executive, legislative, and judicial policy into specific sets of programs to pursue national goals on a consistent basis throughout BLM's field organization. It identifies policy and decision needs for the mid- and long-term future and supports Secretarial officials in coordinating BLM programs with those of other Federal, state, and local governments. The Headquarters Office also assures that program responsibilities delegated to other BLM units are being fulfilled according to established policies and procedures.

There are 12 State Offices, each headed by a State Director with line authority. These offices are the intermediate supervisory and administrative offices responsible for all land and resource programs within their geographic area of responsibility. Each BLM State Office administers a geographic area that generally conforms to State boundaries and consists of one or more States. The map included in this appendix shows the location of the State Offices.

These offices are responsible for planning, developing, and managing renewable and nonrenewable resource programs, and for maintaining relations with the public and with a variety of organizations. The acreage that western State Offices manage ranges from 7 million acres of public lands in Montana to about 150 million in Alaska. The Eastern States Office, headquartered in Alexandria, Virginia, manages approximately 60,000 acres in States that border on or are east of the Mississippi River and leases minerals on 24 million acres of Federal reserved mineral ownership.

At the local level, 55 District Offices develop and carry out resource management work programs. Each office has responsibility for a portion of the geographical area under the jurisdiction of the State Office. Districts are the basic field component of

BLM and are headed by a District Manager, who is a line official. In the lower 48 States, the largest District is the California Desert District with over 12 million acres. In Alaska, the Fairbanks District contains approximately 60 million acres. The smallest District is Tulsa, Oklahoma, which administers only 7,000 surface acres in the State of Oklahoma. The average size of a District in the lower 48 is about 3 million acres, or an area about the size of Connecticut. In Alaska, the Anchorage and Fairbanks District sizes are changing rapidly, due in large part to the Alaska National Interest Lands Conservation Act.

Districts are divided into Resource Areas. The line official for an Area Office is the Area Manager who has responsibility for day-to-day resource management activities and implementation of on-the-ground actions for use of the public lands.

Resource Areas in the lower 48 States range in size from 5.5 million acres in the Tonopah Resource Area of Nevada to other small Resource Areas, located in various States, ranging from 25,000 to 50,000 acres. By comparison, the Arctic Resource Area in Alaska administers approximately 27 million acres.

There are 154 Area Offices in BLM, many of them sharing office locations with District Offices. Fifty-six are detached Resource Area Headquarters in separate communities.

Two Field Offices provide special support to BLM: The Denver Service Center and the Boise Interagency Fire Center. The Denver Service Center provides consolidated administrative support to State and District Offices and, to some extent, to the Washington Office. It is also charged with gathering, storing, and retrieving natural resource data and adapting scientific and technological concepts to field use. The line official of the Service Center is a Director who reports to the BLM Director in Washington.

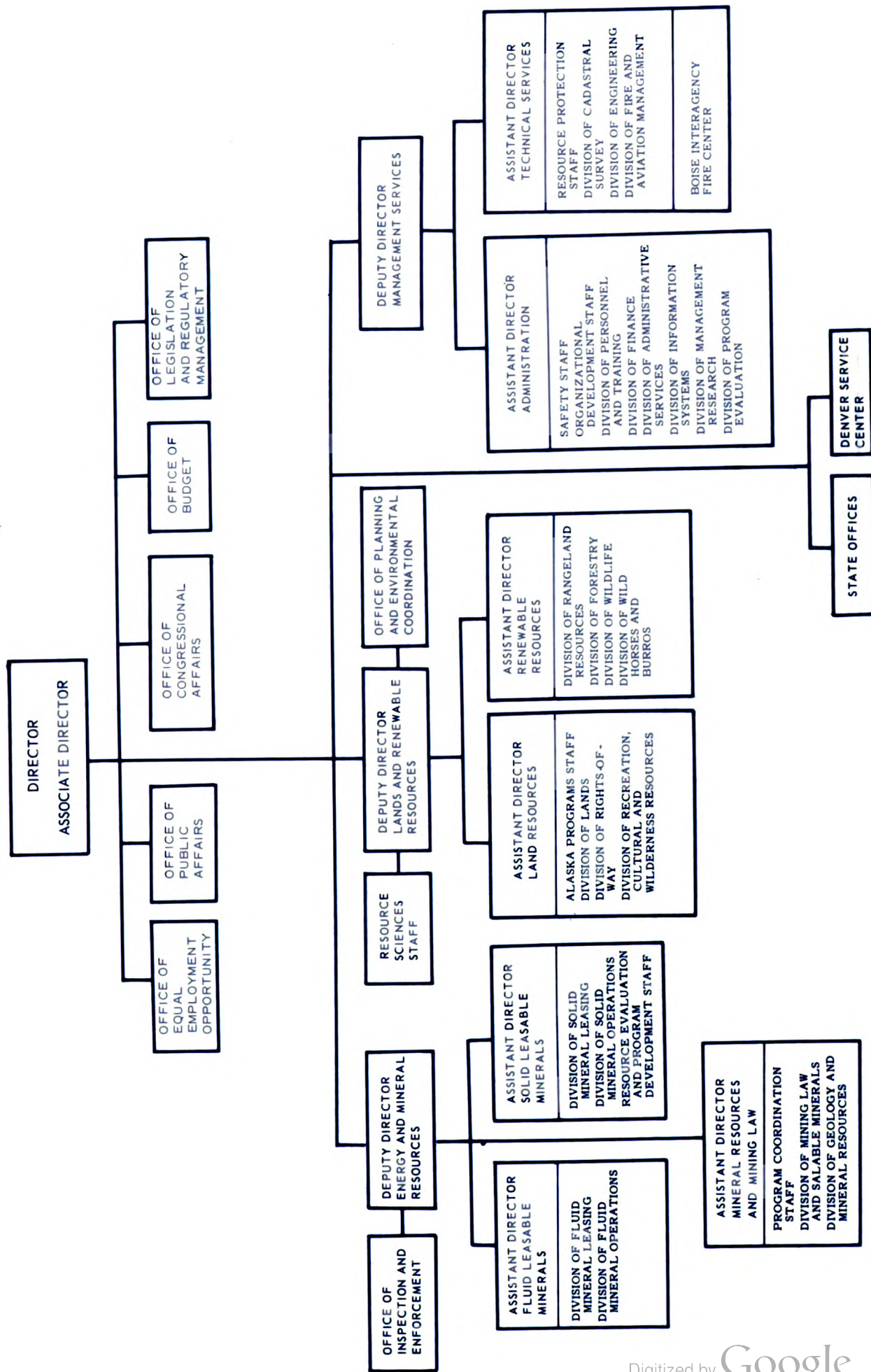
The mission of the Boise Interagency Fire Center (BiFC) is to pool interagency fire fighting resources and deploy them when wildfires get beyond the control of local BLM, Forest Service, Bureau of Indian Affairs, Fish and Wildlife Service, and National Park Service officials. The responsible BLM official is the BLM Director, BiFC, who reports to the Assistant Director, Technical Services in Washington. BiFC has a permanent work force which is supplemented by additional personnel as fire conditions dictate.

On December 3, 1982, the Secretary signed Order No. 3087 which transferred the majority of the On-shore Mineral functions from the Minerals Manage-

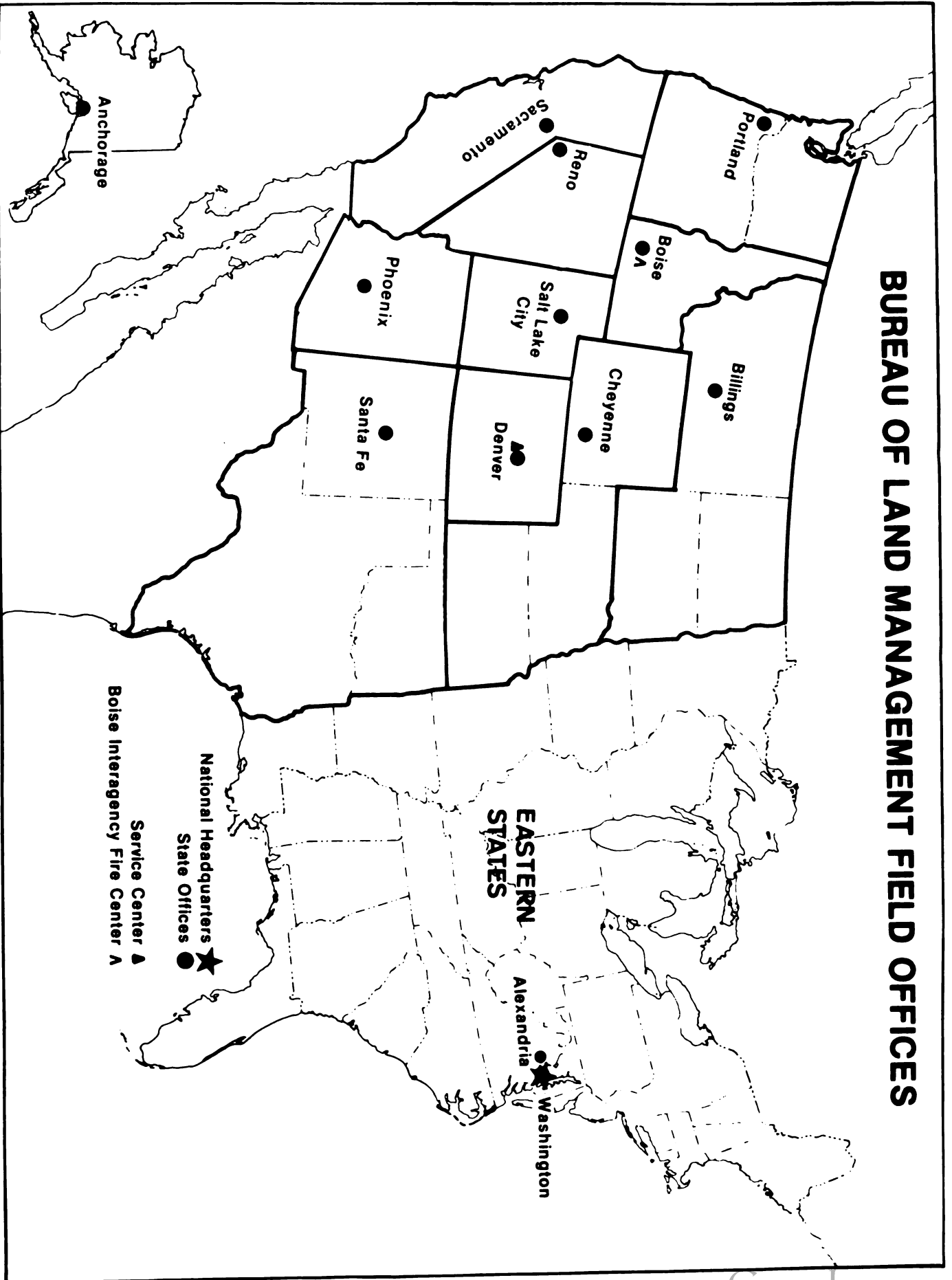
ment Service to BLM. This transfer of functions will increase BLM's efficiency and effectiveness and will provide greater opportunities for industry to deal with only one Government agency in the conduct of mineral leasing activities. Reorganization of the

BLM's Headquarters and field offices has been essentially completed with only minor adjustments to be made during the coming year to improve overall operations. The current organization chart for BLM is shown as part of this appendix.

BUREAU OF LAND MANAGEMENT



BUREAU OF LAND MANAGEMENT FIELD OFFICES



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U.S. Department of the Interior. As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

*Managing the Nation's
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JA 15 '85

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